WYOMING Land Use Decisions

Pioneer Trails Area
Rock Springs District

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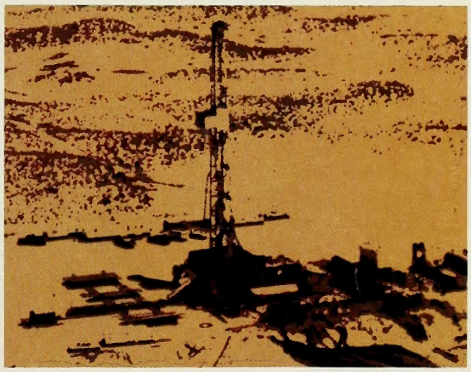

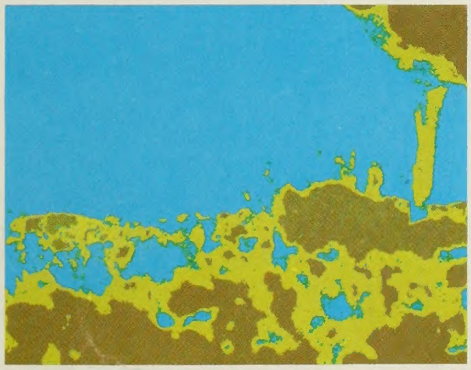

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LANDS

MINERALS

RANGE
MANAGEMENT

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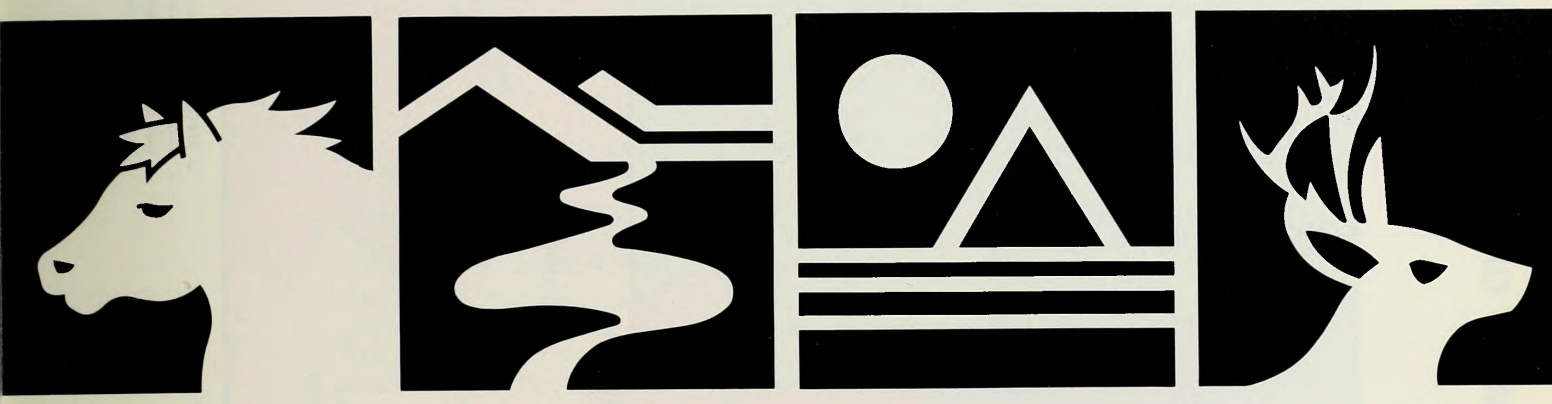
WILD, FREE-ROAMING HORSES

WATERSHED

RECREATION

WILDLIFE



Here are your copies of

WYOMING

LAND USE DECISIONS

Bureau of Land Management
United States Department of the Interior

Since these brochures went to press, there has been a federal court order directing the Department of Interior to re-examine its coal leasing policy. This is presently being done. This should be taken into consideration as you read the decisions relating to coal in the minerals section. Also, no environmental statements dealing with coal will be completed until a new policy is formulated and approved by the courts.

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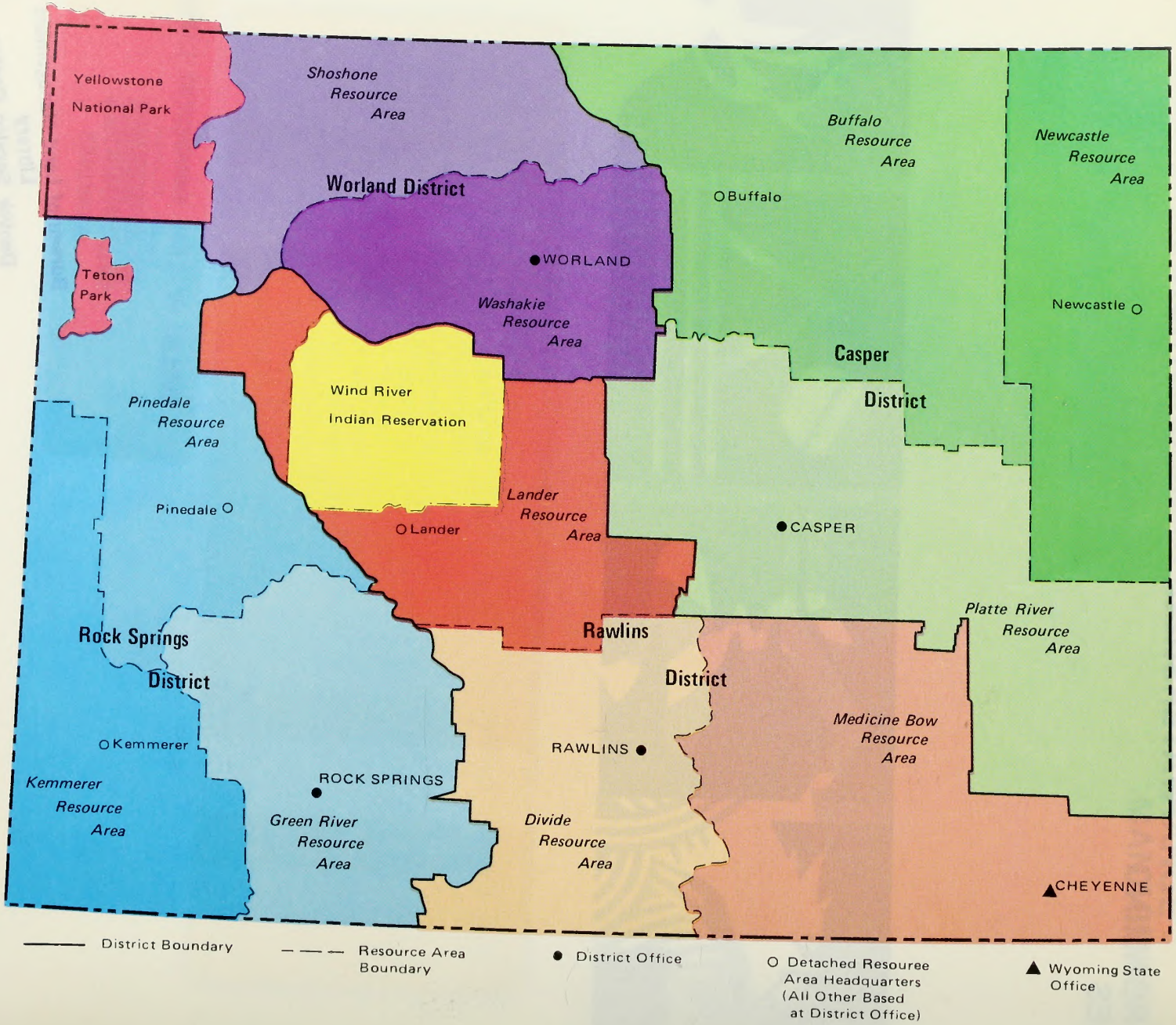

PURPOSE

The purpose of this brochure is to summarize the land use decisions for the Pioneer Trails Management Framework Plan (MFP).

Because of the large number and complexity of the decisions, it is impossible to present all of them in this summary. We have, therefore, summarized only the significant decisions in each resource activity.

The Pioneer Trails plan, with all related documents, is available at the area office in Kemmerer. You are invited to visit and review it at your convenience. Ken Harrison, Kemmerer Resource Area Manager, as well as my staff and I are available to discuss the decisions and assist you in reviewing the document.

Again, I thank all the persons, organizations and governmental agencies which contributed so significantly to this project. Your assistance was invaluable in completing resource inventories, developing future land use recommendations and commenting on these recommendations as well as the decisions for use on the public lands.

Neil F. Morck
District Manager
Rock Springs District
July 28, 1977

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OVERVIEW

This brochure represents a revision and consolidation of several previous Management Framework Plans (MFPs) which were prepared prior to 1973. The revision was needed to provide current land use guidance for the environmental analysis of coal leasing.

This plan will serve as a guide for the surface management of the public lands as well as the federal mineral estates, some of which lie under privately owned surface lands.

The plan includes a narrative and graphic display of the land use decisions supported by rationale and summary of public input for each program (lands, minerals, range, forestry, watershed, recreation and wildlife).

The management framework plan is a working document which guides day-to-day activity. The planning decisions allocate resources and land uses, thereby defining and resolving use conflicts. Program objectives and land use allocations in the MFP provide a framework for developing program action plans to manage individual resources.

These planning decisions are subject to revision at any time in response to changing conditions or demands. Significant revisions will involve public input and review.

Public participation is an integral part of the Bureau of Land Management (BLM) planning process. This process encourages all interested citizens to express their views and desires, raise specific issues and explore alternatives in the various planning areas.

Public involvement for the Pioneer Trails MFP began in the summer of 1976 with individual contacts to gather information and to acquire recommendations concerning future land use. Planning was discussed with a variety of special interest groups during November 1976.

Workshop sessions gave the public a chance to express just what "public" opinion is.

A series of articles appeared in the *Rock Springs Rocket-Miner* in late November highlighting the planning effort and proposed decisions. News releases were provided to all regional media and wire services. A brochure was distributed to interest groups and mailed to a variety of interested individuals.

News articles appeared in all of the newspapers in the district as well as on radio and television newscasts. On November 30, 1976, the proposed land use decisions, with a summary of public comment, were presented to the District Multiple Use Advisory Board for its review. In November and December 1976, we met with Sweetwater, Lincoln and Uinta County Commissioners, their planning commissioners and planners to review the planning procedure.

Open house and workshop sessions were held in Evanston and Kemmerer in December 1976. These meetings were attended by a wide cross-section of the public and industry. Approximately 50 people commented on the major issues through the workshop and in writing.

The workshop group made recommendations on land disposal, coal leasing, oil and gas development, range management, watershed protection, off-road vehicle use, historic trails, wildlife habitat, wild horse management and other issues. The workshop was well reported in the news media.

A brochure highlighting proposed decisions was distributed in April to all agencies and individuals who had expressed interest. A well publicized public meeting was held in Kemmerer on April 25, 1977 and included a formal public hearing. Approximately 30 people attended and asked many questions, although no formal statements were offered. Written comments received as a result of that hearing were considered in the final drafting of decisions.

Neil F. Morck
District Manager

GENERAL DESCRIPTION

(See Land Status map, page 5 and General Location map, page 7.)

The Pioneer Trails Planning Unit is located in southwestern Wyoming, covering most of Uinta and Lincoln Counties, the extreme western part of Sweetwater County, small portions of Bear Lake County, Idaho and a part of Rich County, Utah. It is bordered on the south and west by Utah and Idaho, on the north and east by the Bridger-Teton National Forest, Fontenelle Creek and the Green River.

The unit is approximately 75 miles from east to west and 130 miles, north to south. In the northern part, the land ownership pattern consists of large blocks of public lands with intermingled tracts of private and state land. The south half of the unit is mostly checkerboard land with alternating sections of state, private and federal ownership.

Land ownership statistics are shown in the Lands Section.

The topography ranges from rolling hills and buttes in the east to high mountains and escarpments in the west caused by overthrust faulting. Elevations range from 6,100 feet in the valleys to over 8,500 feet in the mountain foothills. Most of the unit is in the Green River Basin, except for the area along the Utah-Idaho border which drains into the Bear Rivers (Great Basin).

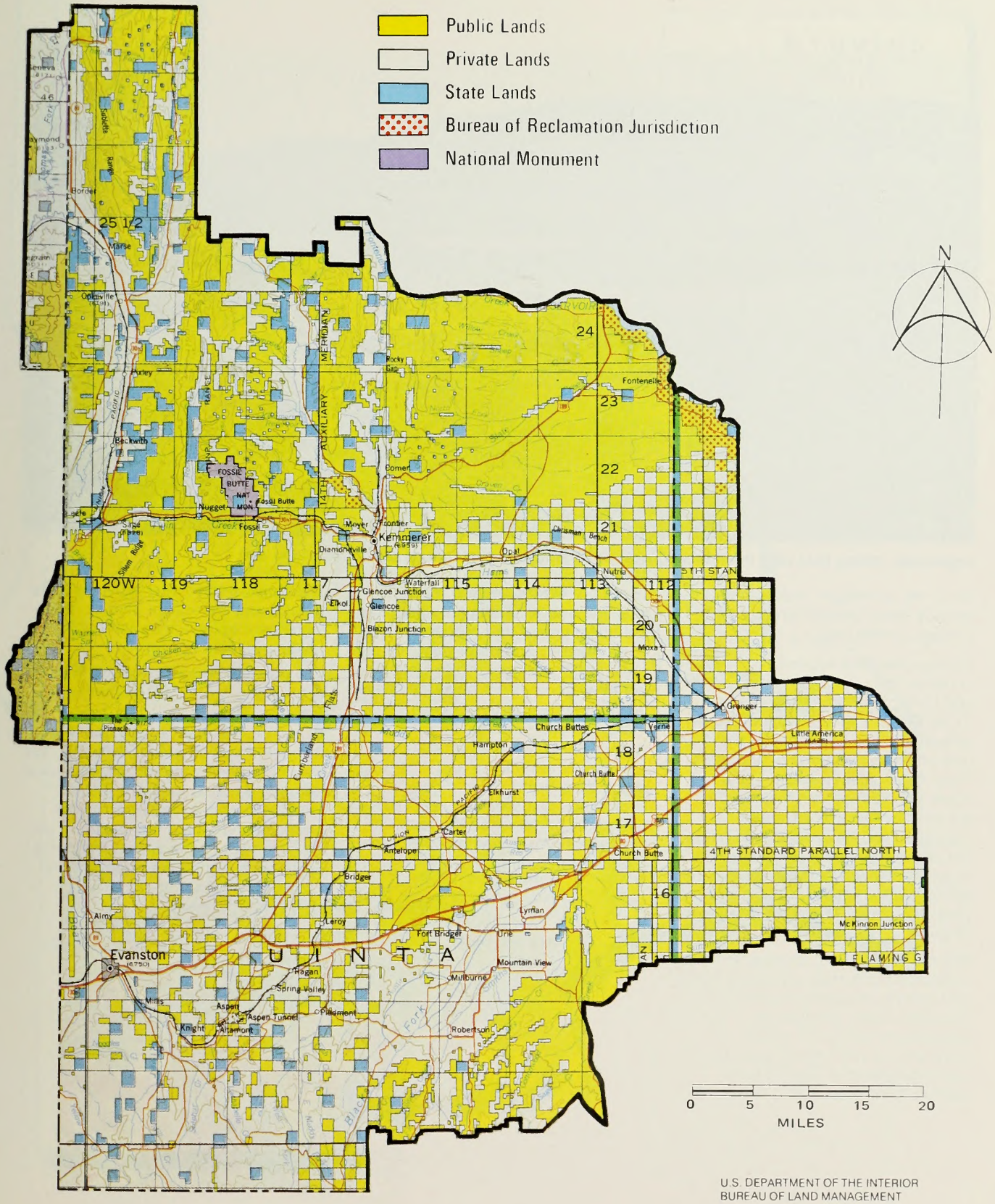
Precipitation ranges from 16 inches in the west to 8 inches in the east. The Bear River Divide and the Tump Range on the west side of the unit receive 12-14 inches of annual precipitation. The Hams Fork and Blacks Fork drainage in the eastern half of the unit receive from 8-10 inches annually. Most precipitation occurs in the spring and fall. Heavy snow pack at higher elevations contributes directly to the high precipitation belts.

The unit has cool year-round temperatures, with west to southwest winds during fall, winter and late spring. Mean yearly wind speed is 13 mph. Temperatures are subject to extreme variations, both seasonally and day-to-night. Temperatures in the lower 90's occur occasionally in the summer, but 80 degree temperatures are more prevalent. Freezing temperatures can occur any month and winter lows are frequently below zero. An average of 71 frost-free days can be expected, depending upon location and elevation.

Sagebrush with associated grasses and forbs covers approximately 66% of the area. Saltbush-greasewood, winterfat and desert shrub types comprise the next most prevalent vegetative types. Meadows and cropland are found along the fertile, irrigated bottom lands. Juniper, aspen, Douglas-fir and lodgepole pine are the main forest types found along ridges, foothills and higher mountain elevations.

These badland-buttes near Little America are typical of the western landscape in the Pioneer Trails Unit.

LAND STATUS


Public Lands
Private Lands
State Lands
Bureau of Reclamation Jurisdiction
National Monument
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MILES
Kemmerer
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Opal
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Granger
Little America
Church Buttes
Hampton
Elkhurst
Carter
Antelope
Bridger
Leroy
Fort Bridger
Lyman
Mountain View
Millburne
Robertson
McKinnon Junction
Fontenelle
Cumberland
Glencoe Junction
Glencoe
Elkol
Blazon Junction
Waterfall
Cumber
Moyer
Nugget
Auxley
Oplesville
Beckwith
Pinnacle
Almy
Hagan
Spring Valley
Aspen
Aspen Tunnel
Altamont
Knight
Piedmont
Mills
Sublette Range
Silver Ridge
Rocky Gap
Chrisman Bench
Yarne
Chicken Creek
Black Fork
Blacks Fork
Bear River
Sulphur Creek
Yellow Creek
Muddy Creek
Ham Fork
Hams Fork
Smiths Fork
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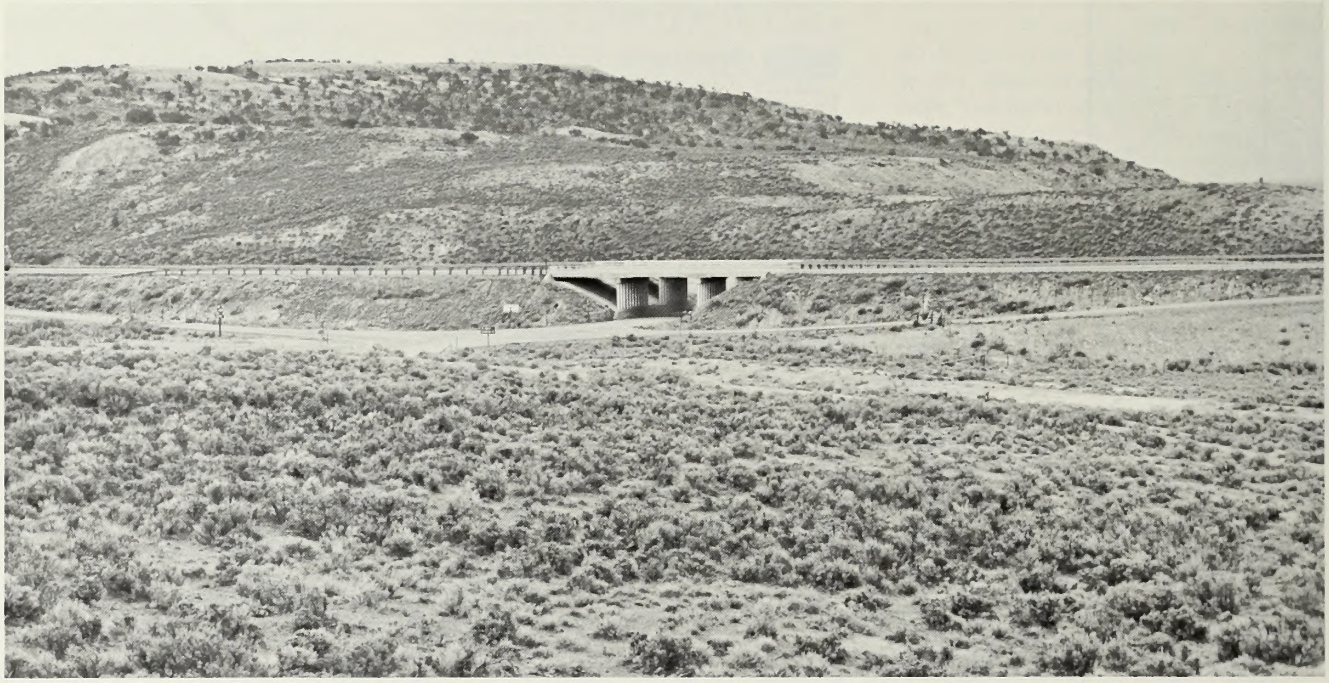


Sagebrush, shown here near Interstate 80 west of Ft. Bridger, covers about two-thirds of the unit.

Deer, elk, antelope, moose and various small animals are present throughout the area.

The environment around communities, ranches, mining areas and transportation routes has been moderately to severely impacted by human activity. Much of the planning unit contains trails, roads and utility lines. Open space, wildlife, sparse human population and historical values make up the essential ingredient for the present and past life style of the local residents. The major population centers are Evanston, Kemmerer, Cokeville, Fort Bridger, Lyman, Mountain View and Granger.

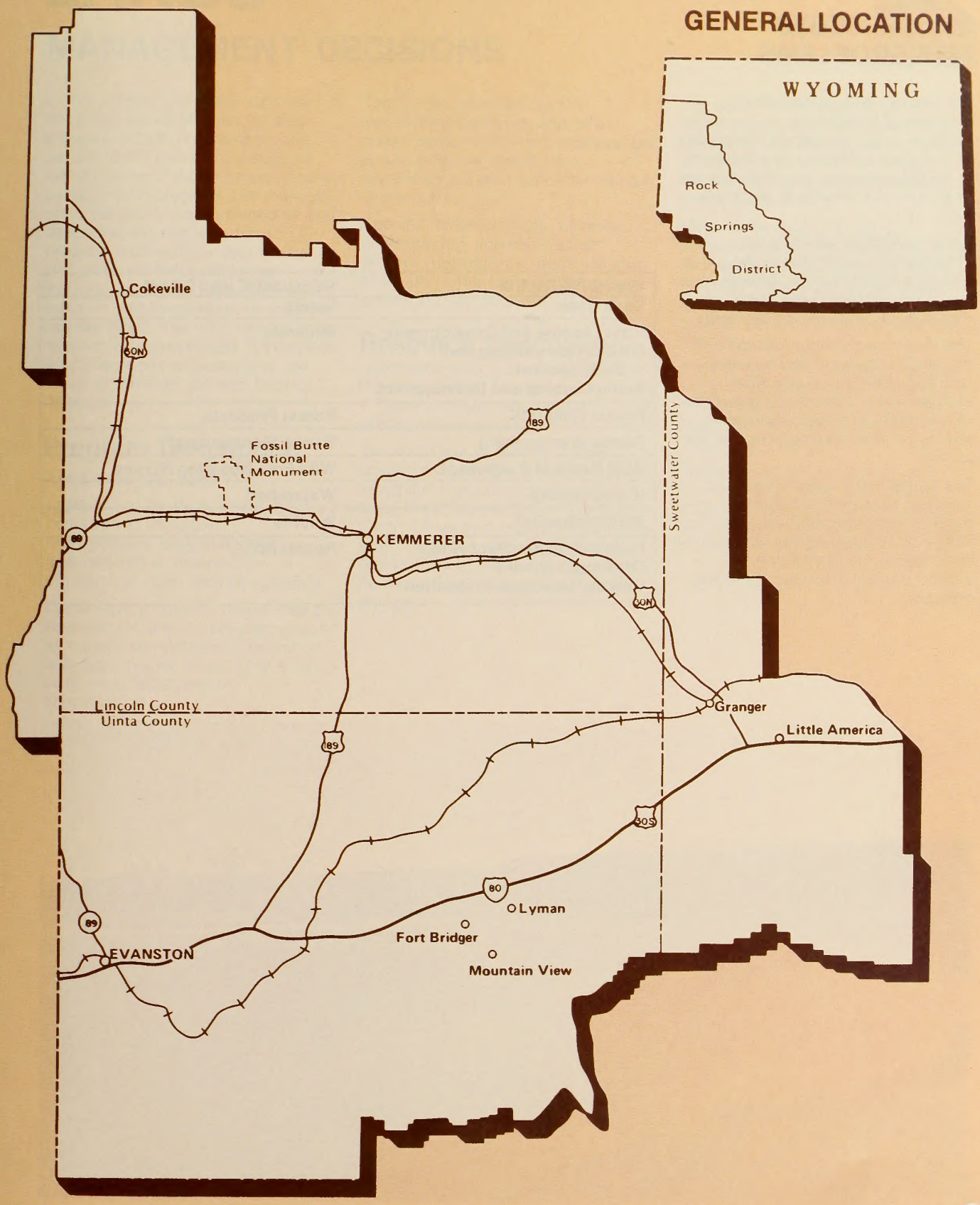
Mineral exploration, development and production activities use public lands and contribute greatly to the local economy. Coal, phosphate, geothermal resources, trona (sodium), oil and natural gas are being extracted or have future development potential.

There are extensive coal reserves near Kemmerer. Phosphate deposits are being mined and processed west of Kemmerer, and other deposits are present throughout Lincoln County. Potential geothermal resources have been identified north of Cokeville. Along the eastern boundary in Sweetwater County, several large companies are mining and processing trona. Oil and gas exploration is increasing north of Evanston, primarily as the result of the recent oil and gas discovery in the overthrust belt.

Livestock, timber, recreation, wildlife habitat and watershed also have a significant influence on the public lands and local economy.

The population density of the area is sparse and far below the national average. The life style has been based on this open space concept of living. Increasing growth will alter this way of life and will produce additional demand on local facilities. Public lands make up a major part of the planning unit. Thus, management and development of the various resources will have a significant effect on the local socio-economic structure.

GENERAL LOCATION



MAJOR ISSUES AND PROBLEMS

The western way of life with its customs of friendliness, neighborliness, mutual aid, enjoyment of the great outdoors and adherence to traditional values is inherent in the thinking and approach to life in the area.

Rapid population growth and industrial expansion due to the energy/mineral situation and the availability of abundant natural resources are influencing the area.

The major issues and problems are the result of present and potential land use conflicts, unavoidable environmental impacts of resource development and socio-economic effects on local communities and life styles.

The issues and problems were identified through the planning process and public participation. These issues or problems will be described in the management decisions chapter for each resource program.

ISSUE/PROBLEM	RESOURCE PROGRAM
Land Uses	Lands
Coal Leasing and Development Oil and Gas Leasing and Development Trona Leasing and Development	Minerals
Forest Products	Forest Products
Range Management	Range Management
Wild Horse Management	Wild Free-Roaming Horses
Water Quality	Watershed
Wildlife Habitat	Wildlife
Special Management Areas Off-Road Vehicles Cultural Resource Protection	Recreation

LANDS

MANAGEMENT DECISIONS

In this section, the major land use decisions are highlighted for each program activity. These decisions pertain to the preceding issues as well as some of the more significant parts of each program. The management decisions are presented by first describing the resource for a program and related major issues and problems followed by the multiple use objective for that program and then listing the multiple use decisions. The rationale for each decision is also provided. A complete list of decisions is available to the public at the Rock Springs District Office.

Program Description

(See Lands map, page 11.)

Lands have, for many years, been conveyed to individuals, organizations, local and state governments or reserved for programs of other federal agencies.

Lands having unusual values may be reserved for specific programs such as mineral development, recreation use, preservation of primitive areas or to await legislation or classification.

The Bureau provides land for community expansion and other public purposes. Private development is also possible where such ownership will best serve the interest of the public.

Specific actions include: planning, classification, appraisal, sales, records maintenance, administration of leases, rights-of-way grants and temporary use permits.

Resource Description

Land ownership in the Pioneer Trails Planning Unit is summarized in Table 1. Table 2 shows the acreage withdrawn by agency.

The north half of the unit contains solidly blocked federal lands. Lands along the major drainages in the area, including the Bear River, the Smith's Fork and Thomas Fork of the Bear River, the Hams Fork and Blacks Fork of the Green River and Pomeroy Basin are predominately private.

The south half of the unit is dominated by a checkerboard land ownership pattern. Generally, even-numbered sections are federally owned and odd-numbered sections are privately owned.

Most of the federal lands are administered by the Bureau of Land Management. Fossil Butte National Monument, encompassing 7,480 acres nine miles west of Kemmerer, is administered by the National Park Service.

The Pioneer Trails Unit also includes 1,360 acres of the Seedskadee National Wildlife Refuge, located along the Green River below Fontenelle Reservoir.

The fragmented ownership of the checkerboard lands necessitates close coordination of management policies and actions between private landowners and the BLM.

The historic Green River . . . water in a dry land.

Related Major Issues and Problems

Growing communities need land for residential, commercial, industrial and public purposes. Approximately 7,500 acres of public lands are reserved for lease or transfer to local government or private ownership as land is needed and determined to be suitable. An additional 6,000 acres are under consideration for transfer to private ownership for agriculture.

To minimize the spread of utility routes into areas now largely free of them, it is proposed to confine major future installations to corridors which presently contain such facilities.

Social well being, income, employment, tax base and the general economy of the area would benefit from controlled land disposal while the environment outside the utility corridors would be protected from these intrusions.

TABLE 1

LAND OWNERSHIP
(as of August 1976)

Ownership	County (Acreage) Lincoln	Bear Lake Idaho	Uinta	Sweetwater	Total Acreage	% of Total
Federal	840,848	11,242	396,622	195,151	1,416,863	47
State	77,666	2,320	51,533	8,312	139,831	5
Private	398,598	44,288	811,960	221,444	1,476,290	48
TOTAL	1,317,112	57,850	1,233,115	424,907	3,032,984	100

NOTE: Approximately 25,000 acres (federal) in Rich County, Utah, are administered for livestock grazing only.

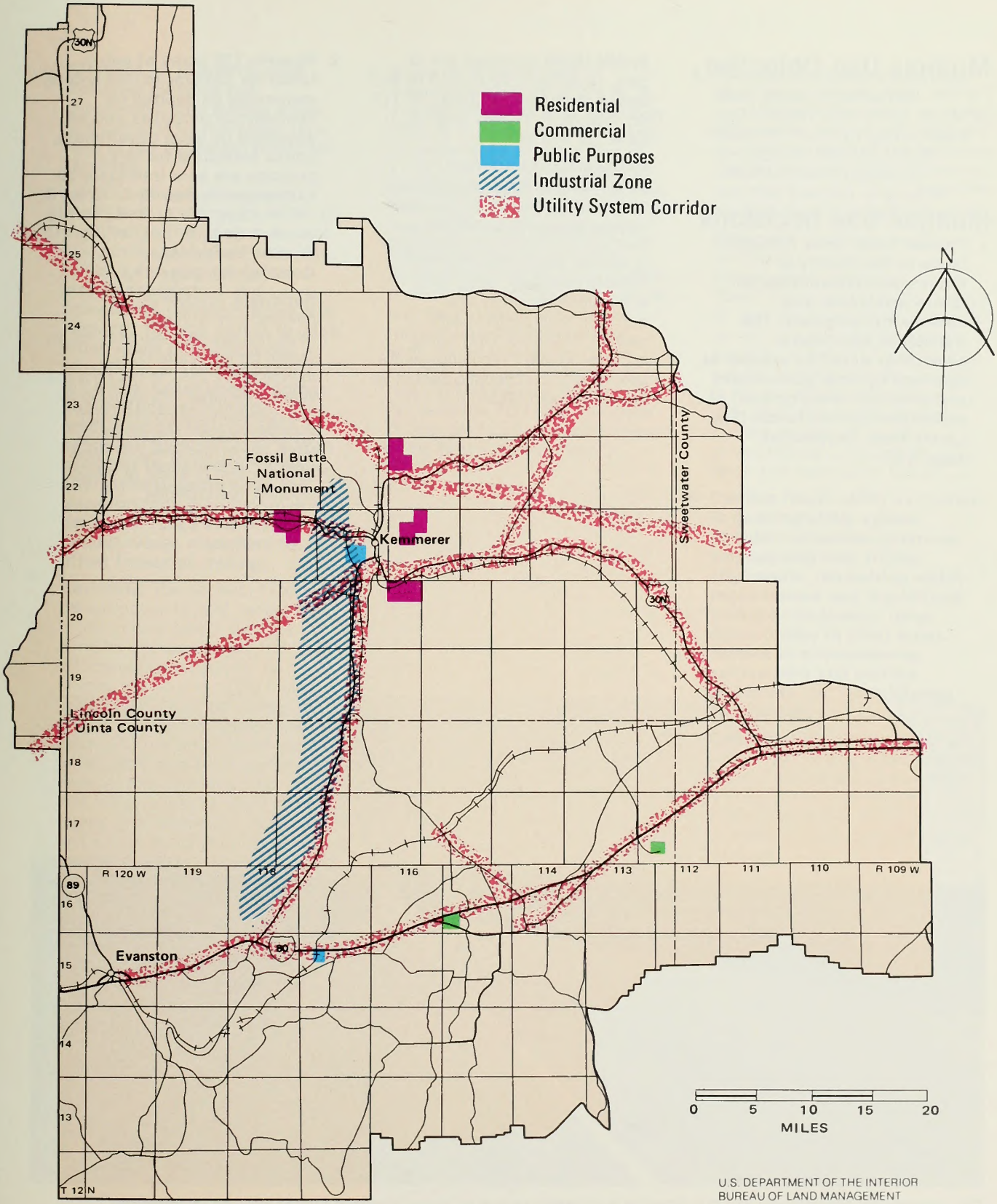
TABLE 2

LAND WITHDRAWALS
(as of August 1976)

Type of Withdrawal	Administering Agency	Acreage[1] Dup[2]	Non-dup[3]
Oil Shale	GS	13,560	406,905
Coal	GS	640	135,480
Phosphate	GS	18,680	25,940
Reclamation	BR	14,960	30,765
Public Water Reserve	BLM	90	1,640
Fossil Butte National Monument	PS	5,820	1,660
Communication Site	CAA	40	240
Protective (Recreation Site)	BLM	—	80
Seedskadee National Wildlife Refuge	FWS	1,360	—
Stock Driveway	BLM	480	—
Flaming Gorge National Recreation Area	FS	120	—
Power Site (Idaho)	FPC	—	40
TOTAL ACRES			602,750

[1]Federal land only.
[2]Duplication of acreage due to overlapping between withdrawals.
[3]Duplicated acres are omitted to determine number of federal acres in the unit included in withdrawals.

LANDS



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Multiple Use Objective

Provide public lands to meet land needs for community expansion, industrial development, other public purposes and agriculture while considering other resource values and uses.

Multiple Use Decisions

1. **Provide 5,640 acres of public lands in the vicinity of Kemmerer/Diamondville for future residential and commercial purposes. The transfer to non-federal ownership would be subject to approval by local government and only after development of associated private lands. (See Lands Map, Residential, page 11.)**

   Public lands included are in: Sec. 10 & 12, T. 20 N, R. 116 W.; Sec. 4, 8, 9 & 17, T. 21 N., R. 117 W.; Sec. 6, 7, 17, 18, 19 & 20, T. 22 N., R. 115 W.

   Rationale: By 1990, it is estimated that the population will double due primarily to industrial expansion. Suitable land for residential/commercial expansion is scarce. Lands identified are suitable based on topography, accessibility to utility and transportation systems and service industries. Only minor impacts on other resources and a positive socio-economic benefit on the area would result.

2. **Reserve 120 acres of public lands for transfer to non-federal ownership as needed for commercial purposes and as approved by local government. Lands identified for this purpose are near Interstate 80 exchanges in Sec. 8, T. 15 N., R. 117 W.; Sec. 30, T. 16 N., R. 115 W.; and Sec. 30, T. 17 N., R. 112 W. (See Lands Map, Commercial, page 11.)**

   Rationale: Interest in development at these interchanges has been expressed. Traffic on Interstate 80 has increased by 25% in the past five years. The lands are valuable for commercial development and highway design. Distances between Wyoming towns favor development of some of these isolated interchanges.

This commercial development at Little America is probably typical of those proposed further west on Interstate 80.

3. **Establish an industrial zone including existing and prospective coal mining areas and portions of the valley floor east of the mines for attendant facilities.**

   Limit buildings and related structures to a zone as close as practical to the eastern face of the mining area. Confine utility, railroad and access rights-of-way to established and prospective corridors along U.S. Highway 189 and routes to each mine. Allow only one route between U.S. 189 and each mine site. Grant access across public lands for mining predicated on reciprocation of continued public access across company lands along routes (or alternatives) identified in the transportation plan. Improve or designate range and wildlife habitat values elsewhere to offset losses by mining.

   Rationale: The decision to allow the extraction of coal cannot be made without recognizing the need for the use of land and the effects of human activity far beyond the bounds of the mined area. Public comment centered around replacement elsewhere of range and habitat to offset losses in this area, and some questioned whether the knowledge and technology exists to offset such losses. The knowledge, technology and nearby adaptable ecosystems do exist to offset range and wildlife losses predicted in this zone.

   Two major advantages of this decision are: (1) the losses can be readily identified and off-site mitigating measures taken well in advance and (2) the proposed mine-related developments can be pre-planned to minimize impacts within this zone.

4. **Reserve 40 acres near Kemmerer (Sec. 27, T. 21 N., R. 116 W.), 40 acres near Evanston (Sec. 4, T. 14 N., R. 120 W.) and 10 acres near Granger (Sec. 6, T. 18 N, R. 111 W.) for lease as community solid waste disposal sites upon a clear expression of need from local governments.**

   Rationale: The Union Pacific Railroad track realignment project is eliminating both existing sites at Kemmerer/Diamondville. If the railroad provides replacement sites, the BLM site may not be needed. Evanston is attempting to close out an existing site and may not need the BLM site. The town of Granger has expressed interest in the BLM site near there.

5. **Transfer to private ownership 6,000 acres of potential agricultural land which occur as isolated tracts of public lands throughout the unit. Each transfer would require a specific analysis to ensure against loss of public values.**

   Rationale: These areas were omitted from retention classification under the Classification and Multiple Use Act of 1964 because of their potential for agricultural crop production and their fragmented and isolated nature. The land pattern and lack of access makes management difficult. Public comment has favored transfer to private ownership with provision to retain lands with high public value.

6. **Confine future utility expansion to existing utility system corridors whenever practical, emphasizing less visible alignments, minimizing width requirements and maximizing multiple occupancy. Issue rights-of-way in other areas subject to environmental assessment and surface protection and rehabilitation stipulations.**

   Rationale: The concentration of utility rights-of-way would prevent many of the impacts associated with intrusions into largely undisturbed areas. Public comment strongly favored this approach.

MINERALS

MANAGEMENT DECISIONS

(See Minerals-Coal map, page 15, and Other Minerals map, page 17.)

Program Description

The minerals program includes the disposal of minerals by lease, license, or permit; coordination of minerals development with other land uses; and the assurance of rehabilitation of mined land; as well as the evaluation and processing of mineral patent applications and appraisals.

Minerals on public lands are categorized by law as:

Locatable—Those that may be "staked" and claimed under the General Mining Law of 1872. These are mainly metals, e.g., gold, silver, lead, copper, zinc and uranium, but also include some non-metallic minerals, e.g., fluorspar, asbestos and mica.

Salable—Those that may be sold under the Material Sale Act of 1947, e.g., common varieties of sand, gravel and stone.

Leasable—Those that may be leased under the Mineral Leasing Act of 1920, e.g., oil and gas, coal, oil shale, phosphate, trona (sodium), potassium and geothermal steam.

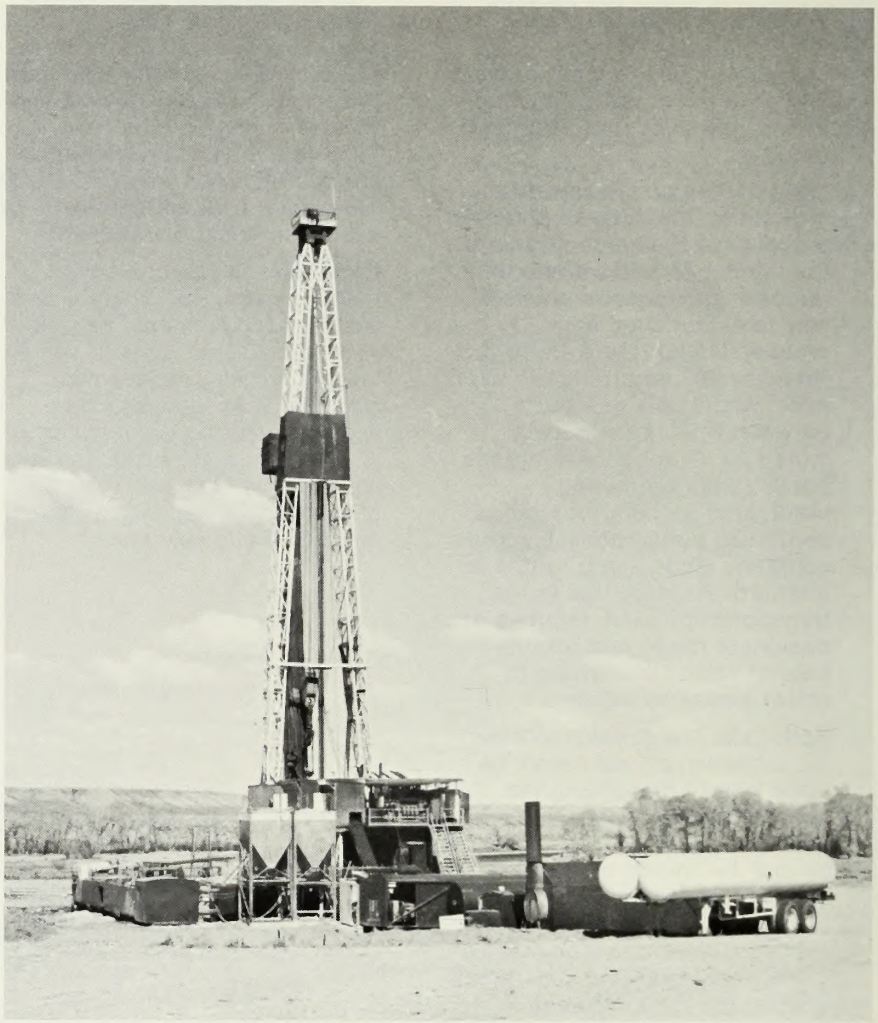
Resource Description

Mineral production is shown in Table 3.

Other minerals in the planning unit which are not currently under production include bentonite, uranium sulphide and oxide and geothermal steam.

Oil and Gas: Both the Green River Basin and the Overthrust Belt contain oil and gas deposits. Most federal oil and gas is under lease. BLM processes about six drilling plans and eight notices of intent to conduct oil and gas exploration per month in the planning unit. Each notice results in an average of 30 miles of seismic line.

Exploration is expected to continue at a high level. The Overthrust Belt which extends through the unit from Utah northward into Montana is considered by national oil publications as one of the most promising exploration areas.



Increased oil and gas development is expected for the next 15 years.

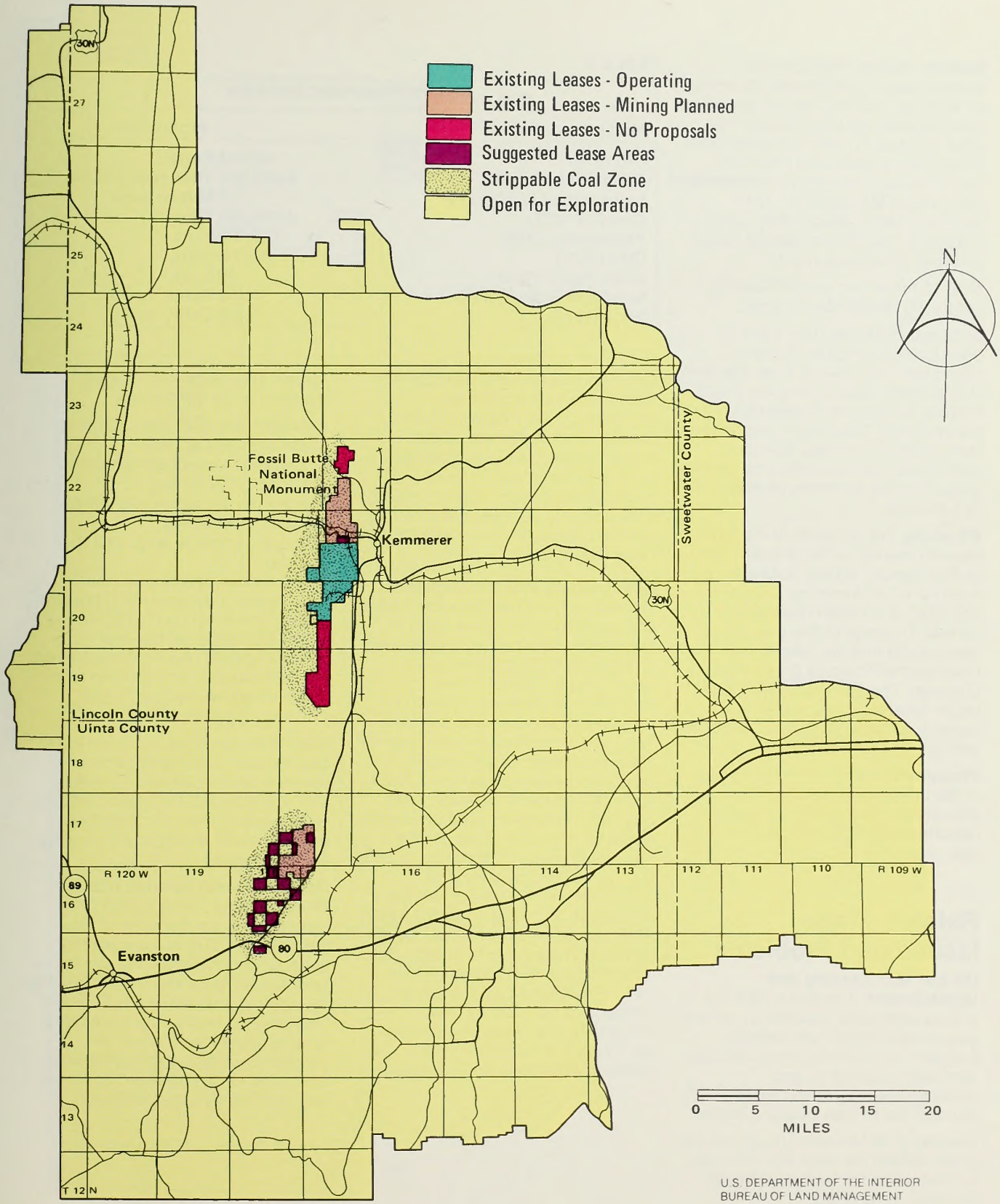
Coal: Captain John C. Fremont reported coal outcrops in the Kemmerer area in 1843. Coal has been produced here since the late 1800's, primarily by underground mining. The recent energy crisis has resulted in increased activity. All current operations are strip or open pit mining.

The USGS has classified the entire area as valuable for coal. Reserves of three billion tons of bituminous coal and five billion tons of subbituminous coal are estimated. The bituminous coal is the highest rank of Wyoming coal at 11,000-12,000 Btu per pound. The coal seams outcrop in long narrow belts along thrust faults and folds.

Not all of the resources can be economically mined due to thin beds, cost of transportation and mining difficulties in many areas. The bituminous coal, for the most part, can only be removed by deep mining methods. On the other hand, most subbituminous coal can be removed by strip mining.

Much of the economic reserves occur in the checkerboard lands with Union Pacific Railroad and subsidiaries controlling most of the mineral rights on the odd numbered sections.

MINERALS—COAL



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Sodium (trona): Production of sodium began in southwest Wyoming as early as 1902. Increased operating costs caused the brine evaporation plant to close in 1908. Oil developers in the 1930's discovered the main bed of trona and underground mining (Westvaco/FMC) began in 1947. Stauffer (1962), Allied (1968) and Texasgulf (1977) have opened mines and built processing plants.

Most of the known sodium leasing area is on checkerboard lands.

Soda ash produced from trona is used to produce glass. Trona is mined from the Wilkins Peak member of the Green River Formation which extends beyond the boundaries of the planning unit. Reserves in the known trona beds are at least 50 billion tons. Production of trona is by underground mining at depths of from 500 to 1,500 feet.

Oil shale: The oil shale of the Green River Formation is the largest hydrocarbon deposit known. Estimates put the total oil in Wyoming, Colorado and Utah at 2 trillion recoverable barrels. Deposits in this unit are of lower grade and are deeper than those of the Piceance Creek Basin in Colorado. The estimated 400 billion barrel reserve in this part of the basin is not economically extractable with present technology.

Phosphate: Much of the phosphate in the unit is of low grade. There is one active mine and mill at Leefe (Stauffer Chemical) with about a 10-year reserve.

TABLE 3

Mineral Production Statistics	
Mineral	**Production**
Oil (1975)	**50,694 Barrels**
Gas (1975)	**8,020,354 Thousands of cu. ft.**
Sodium (trona) (FY 1976)	**7.7 Million Tons**
Coal (FY 1976)	**4,500,000 Tons**
Phosphate (1976)	**125,000 Tons**
Clay (1976)	**60,000 Tons**
Shale Rock (1976)	**40 Tons**
Sand and Gravel (1976)	**1,200 Cubic Yards**
Rock (1976)	**1,500 Cubic Yards**

Related Major Issues and Problems

Oil and Gas Leasing and Development: The entire planning area is potentially valuable for oil and gas, though largely unexplored. Demand far outstrips production and increased exploration and development may be expected through the 15-year planning period.

Leasing of all the area for oil and gas could benefit the local and regional economy and increase supplies of domestic oil and gas.

Continued leasing and development might adversely impact the environment, community services, critical watershed areas, water quality, visual resources, critical wildlife habitats, sage grouse breeding complexes, raptor nesting sites and prairie dog towns which may be habitat for the endangered black-footed ferret.

Coal Leasing and Development: The Kemmerer Coal Company's Elkol and Sorenson strip mines west of Kemmerer produced 3.3 million tons in 1974. FMC Corporation is developing a mine ten miles southwest of Kemmerer which is expected to produce 600,000 tons in 1976 and 1-2 million tons per year by 1980. Kemmerer Coal Company is proposing to open their North Block north of Kemmerer between 1980 and 1982. Estimated 1982 production would be 1.4 million tons. Rocky Mountain Energy (RME) plans to open the Twin Creek mine west of Kemmerer in 1977 with an annual production of 3 million tons by 1980. RME also plans to open their South Haystack mine in Uinta County about 15 miles northeast of Evanston in 1979. Production could reach 3 million tons per year by 1980. Immediate coal issues involve the narrow belt of strippable coal between Kemmerer and Evanston.

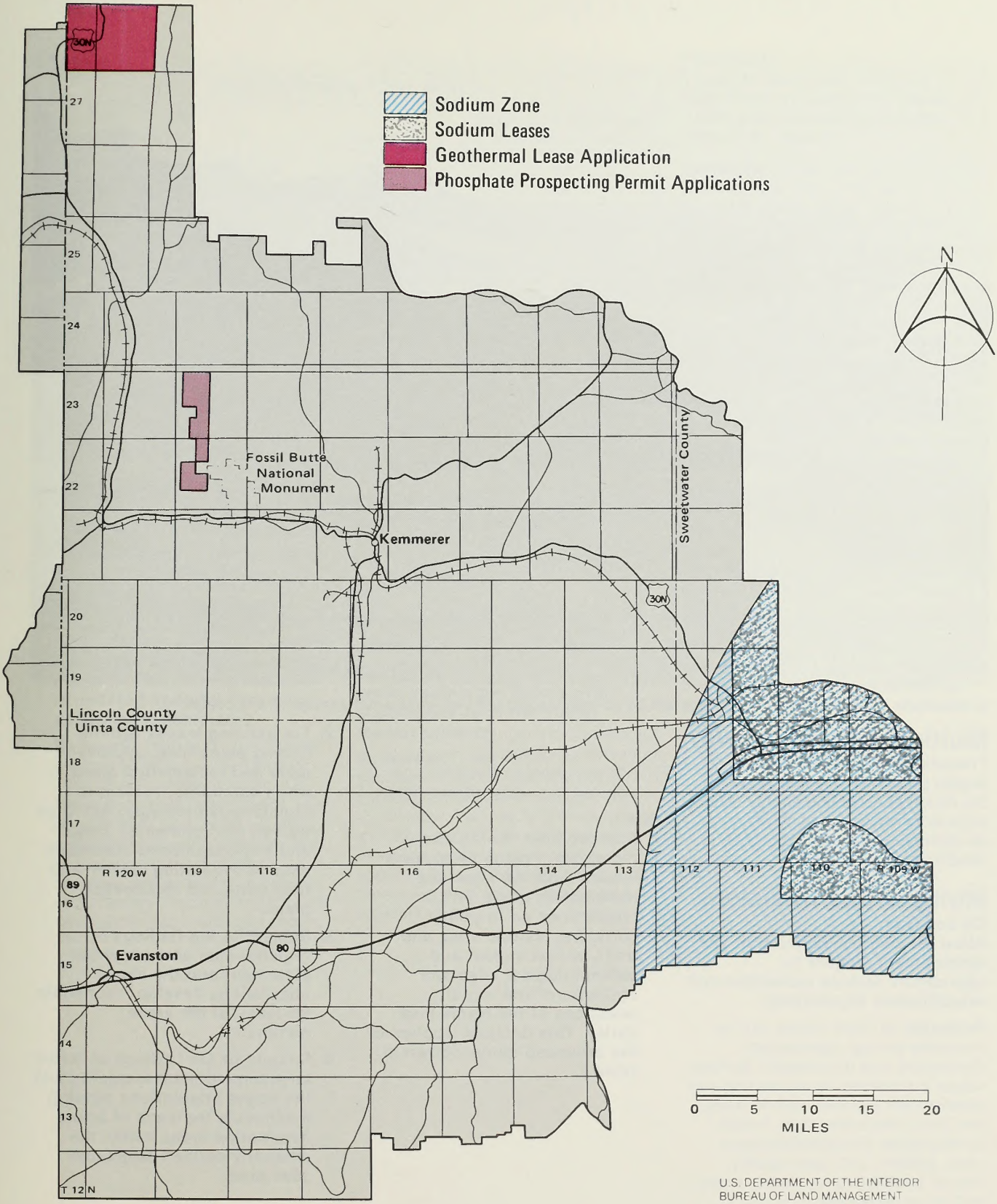
Federal coal resources may be identified in six categories:

1. Presently leased with operating mines (4,800 acres).
2. Presently leased with proposed mines (5,800 acres).
3. Presently leased, no mining plan filed (5,760 acres).
4. Suggested lease areas (8,100 acres).
5. Remainder of strippable and economic coal reserve subject to future nomination (18,000 acres).
6. The remainder of the coal resource will require underground mining and is not expected to be developed during the 15-year planning period.

Coal development would exert both positive and negative impacts on regional socio-economic systems, and would negatively impact wildlife, visual quality, domestic livestock grazing, water quality and air quality during operation.

Sodium (Trona) Leasing and Development: Trona mining is limited to an isolated area of the planning unit. Since it is mined by underground methods, the effects on land are far more site-specific than in the case of strip mining. Issues that may develop involve the cumulative air degradation as a result of increased production and problems associated with large settling ponds and their highly toxic contents.

OTHER MINERALS



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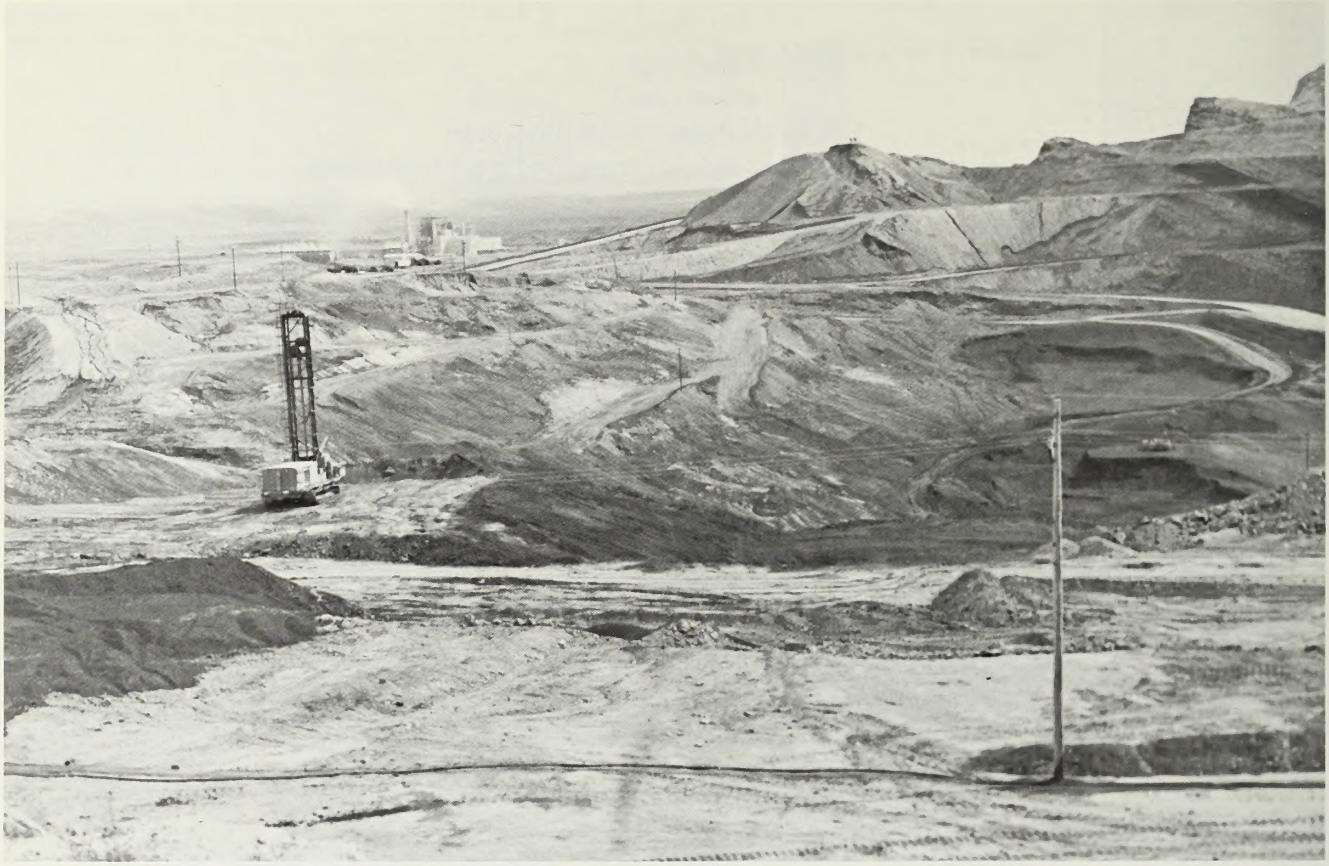


A Kemmerer Coal Company mine. There will be no new leasing until environmental assessment is complete.

Multiple Use Objective

Promote mineral development in an orderly and timely manner to assist the nation in achieving energy self-sufficiency while providing adequate environmental safeguards and strict rehabilitation standards.

Multiple Use Decisions

Oil and Gas

Allow oil and gas exploration and development subject to appropriate surface protection and rehabilitation stipulations.

Rationale: Surface values can be protected through appropriate stipulations and reclamation. Surface values considered during leasing and development include: historic trails and sites, recreation sites, known archeological and paleontological sites, streams and water quality, critical wildlife habitat, timber areas and visual resources.

The entire planning unit is considered an economic oil and gas resource. The development of this resource contributes to energy independence.

Coal

1. **Approve filed mining and reclamation plans on present leases. Approve mine and reclamation plans with stipulations as to utility corridors, historic sites and trails, archeological and paleontological sites and agricultural and visual resources of the Hams Fork Valley. This decision applies to the proposed mines shown in table 4.**
2. **For existing leases with no mining plans filed, approve mine and reclamation plans when submitted, subject to stipulations previously listed as well as environmental, visual and socio-economic standards used in evaluating leases with filed mine and reclamation plans.**
3. **Subject to the findings of the regional coal environmental statement and the above stipulations develop a schedule for lease of the areas nominated.**
4. **Subject to the findings of future environmental assessments and the above stipulations develop a schedule for lease of future nomination areas within the presently defined strippable coal zone.**

TABLE 4

PROPOSED NEW COAL MINES		
Mine/Company	Acres	Estimated Reserves Millions of Tons
North Block/Kemmerer Coal	2,950	50
Twin Creek/RME	2,320	40
South Haystack/RME	6,000	60

Rationale: Conversion from oil and gas use to other forms of energy wherever possible is necessitated by the diminishing supply of oil and gas. Use of the nation's vast coal resource would provide time to develop other forms of energy and to stabilize the country's economy. Coal consumption in the United States is projected to double by 1990. Coal in the planning unit will be in high demand because of its low sulphur, low ash, high Btu rating, easy accessibility and proximity to adequate transportation. Public support for mining was voiced at MFP meetings with the stipulations previously listed.

5. **Keep the planning unit open to coal exploration. No new areas are to be leased until the MFP is updated and environmental assessment completed.**

   Rationale: Interest in the deeper coal reserves is unlikely prior to 1990. Public comment supports the approach of total commitment of strippable coal in the planning unit before allowing development of the underground mining reserves. More data on these reserves are needed before future development can be assessed.

Sodium (Trona)
Provide for exploration and orderly development of the sodium resource. Process lease and exploration applications and attendant rights-of-way on a "pipeline" basis.

Rationale: Three of the four major producers of sodium in Wyoming are in this planning unit. Annual production is approximately seven million tons and is increasing. Although leased reserves and refining capacity are probably adequate through 1990, new deposits must be ready as older deposits are exhausted.

The impacts of exploration and the expansion of mining during the planning period appear to be minimal.

Geothermal
Issue geothermal leases with stipulations to protect other resource values.

Rationale: The potential for geothermal development in the unit can only be identified through exploration. Leasing is prerequisite to that exploration. The geothermal resource orders furnish continuing opportunity to provide environmental protection prior to exploration and development.

Phosphate
Evaluate phosphate areas to determine if competitive lease sales and prospecting permits should be allowed.

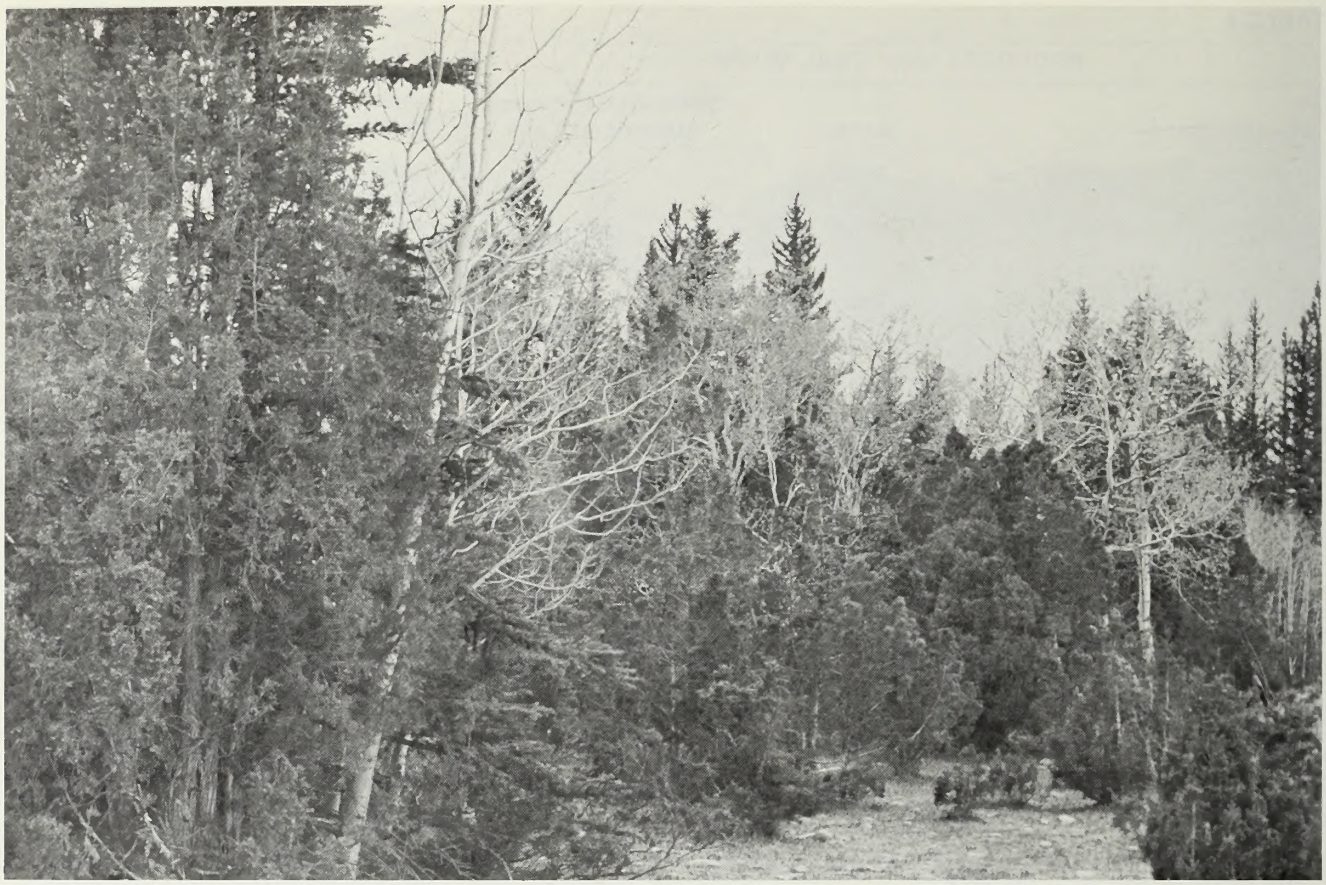
Rationale: Phosphate deposits in the planning unit are suspected to be of marginal quality when current mining technology and market conditions are considered. Premature attempts to develop the resource could inflict unnecessary environmental damages while compromising future development of these ore bodies. A joint study by BLM and USGS will consider environmental impacts as well as an evaluation of the worth of the resource in relation to the cost of removal.

Sand and Gravel
Identify areas suitable for sand and gravel sales adjacent to expanding communities.

Rationale: The growth of communities and support facilities (buildings, roads, etc.) will increase demand in the next 15 years. Quality determination will require inventory and exploration. Excavation will create surface disturbance. As specific sites are identified, impacts can be mitigated or the site can be rejected.

FOREST PRODUCTS

MANAGEMENT DECISIONS



Dense juniper stands in the unit provide little commercial timber.

(See Forest Products map, page 21.)

Program Description

The forestry program manages forest resources on the public lands. Specific activities include forest development and rehabilitation; timber management; sale of timber, posts, poles and other vegetative products from forest lands; timber trespass abatement; and forest pest and disease control.

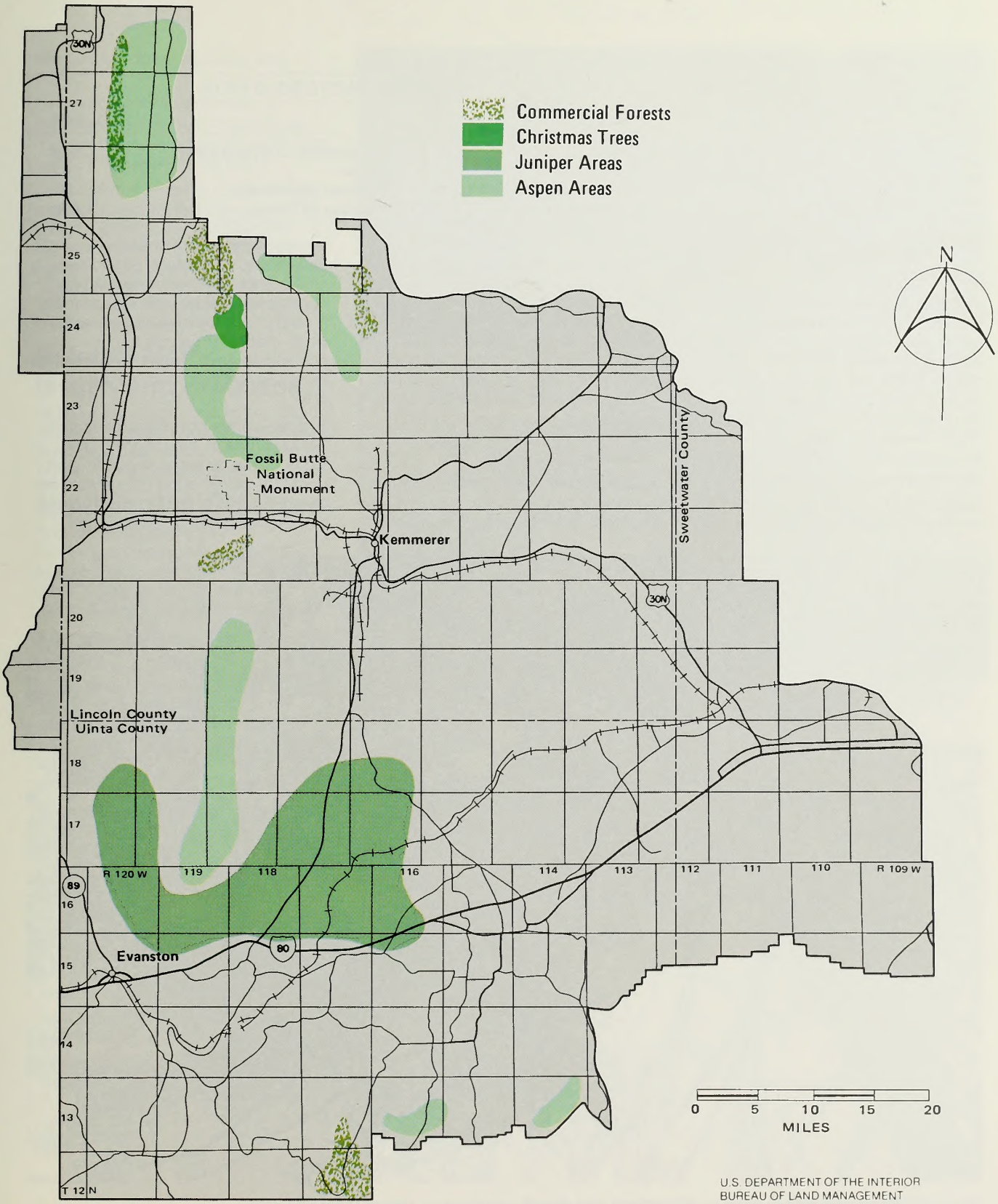
TABLE 5

ACRES OF FORESTED LAND	
Type	Acreage
Douglas Fir	1,993
Subalpine Fir	2,102
Lodgepole Pine	10,080
Unclassified	5,777
Pinyon Juniper	30,763
Broadleaf Trees	53,518
TOTAL	104,233

Resource Description

Acres of forested land in the planning unit are shown in Table 5. Table 6 shows the quantities of forest products sold.

FOREST PRODUCTS



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Lodgepole pine stands occur mainly in the Upper Pine Creek and Meek's Cabin areas. Stands in the Upper Pine Creek area are generally in a thrifty condition, but some overmature stands show signs of deterioration with small outbreaks of mountain pine beetle. Stands in the Meek's Cabin area are a mixture of size classes ranging from young thrifty timber to overmature, dying and dead trees.

Douglas fir stands occur mainly between Dempsey Ridge and Rock Creek, and in the Sublette Range north of Cokeville. Generally, these stands are in fair condition, but some show evidence of considerable deterioration on the poorer sites. These stands are mature to overmature with very few well-developed young growth stands.

Subalpine fir can be found throughout the higher elevations of the planning unit and is the climax species in most of the lodgepole pine forest stands. Large acreages are found on the eastern slopes of the Sublette Range and Dempsey Ridge. This species shows considerable deterioration in the older age classes and is generally overmature, of poor quality and with considerable rot. It is reproducing under overstories of lodgepole pine, Douglas fir, and aspen.

Aspen occurs throughout the higher elevations of the planning unit. Many of these stands are deteriorating with no aspen reproduction in the understory. At present, aspen has little commercial value and is only occasionally taken with other timber. It rarely reaches sawlog size and when it does, it usually has considerable rot. There is no demand for chips and pulp from aspen in this area.

Juniper stands cover approximately 30,000 acres of the planning unit. Much of this acreage is public land. Very little information is available as to the condition, but most of these stands would be classed as non-

TABLE 6

FOREST PRODUCTS SOLD FY 76

Product	Unit	Quantity
Timber	Thousands of Board Feet	546
Fuelwood	Cords	83
Post & Poles	Number of Permits	4
Christmas Trees	Number of Trees	1,890

Dwarf mistletoe infestations such as this reduce new growth, particularly among lodgepole pine.

productive except as posts and poles.

Lodgepole pine stands are overstocked and need thinning. In this condition, serious mountain pine beetle infestation could occur.

Dwarf mistletoe is the most serious disease affecting lodgepole pine. Dwarf mistletoe reduces growth, increases mortality and drastically reduces seed production. It has been found throughout the planning unit. The heaviest infestation is in the Meek's Cabin area.

Related Major Issues and Problems

Most of the productive forest stands are overstocked and not producing at their potential. Much overmature timber could be harvested.

Multiple Use Objective

Provide a sustained yield of forest products to meet local demand and to improve stands while considering other resource values such as aesthetics, water quality and wildlife.

Multiple Use Decisions

Commercial Forests
Intensively manage 12,000 acres of productive forest stands with cutting practices tailored to the particular stand. Limit clearcuts to a maximum of 20 acres with a maximum width of 130 yards.

Rationale: Timber is a locally important industry. Demand for sawtimber exceeds the volume offered for sale from all sources. Forest management can benefit other land uses.

Christmas Trees
Maximize Christmas tree production on 1,800 acres of subalpine fir.

Rationale: There is a large demand for commercial and individual Christmas tree sales. Management practices could produce salable trees in a shorter time frame. This program has public support.

Demand for Christmas trees remains high. Accelerated production is a goal on 1,800 acres.

RANGE MANAGEMENT

MANAGEMENT DECISIONS

Building styles change, but grazing use of the public lands has continued for more than 100 years.

(See Range Management map, page 25.)

Program Description

The range management program manages the forage on public lands used by livestock and wild horses. Specific activities include authorizing and supervision of grazing use, development of facilities and protection of the range from weed infestations, pests and diseases.

Resource Description

Livestock grazing in Wyoming began more than 100 years ago. Large ranching enterprises were among the first uses of the public land in Wyoming. Cattle numbers increased from 8,000 in 1870 to 1.5 million in 1885.

Sheep appeared on Wyoming range lands in the mid-1800's and by 1894 outnumbered cattle by more than a million. In 1909 sheep numbers reached a peak of 6 million. These sheep operations were mostly nomadic and many spent all year on the public lands. The range deteriorated under this intensive use. In the 1920's and 30's, ranchers and conservationists demanded controls which resulted in passage of the Taylor Grazing Act in 1934.

Wyoming now ranks first in sheep production and fourth in cattle production in the western states even though sheep numbers have dropped to 1.3 million. Cattle numbers as of July 1976 were 2.1 million. Economic conditions and predator problems are compelling many operators to shift from sheep to cattle.

Most of the planning unit is limited to spring, summer and fall use because vegetation is covered with snow during the winter. Most vegetation does not exhibit significant growth until mid-May and, at elevations of 7,000 feet or more, does not start growth until the first of June.

Most forage production is sagebrush. The meadow and grass types, though less than 2% of the total acreage, contribute approximately 13% of the total forage production. No known threatened or endangered plant species occur in the unit, although several are suspected.

RANGE AND LIVESTOCK MANAGEMENT

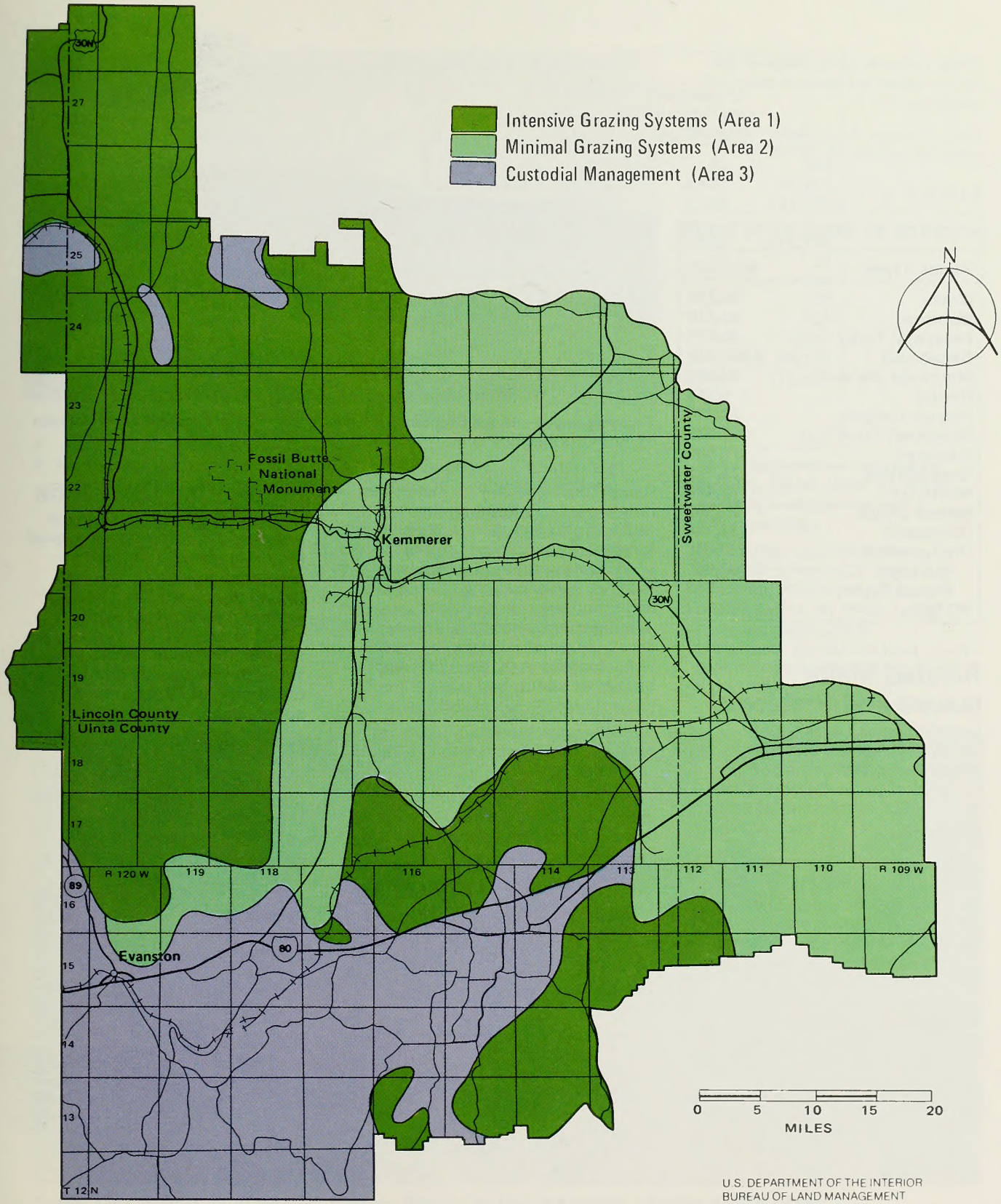

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Table 7 shows the acreage of the major vegetation types in the planning unit.

Table 8 shows range statistics for the planning unit during 1975.

TABLE 7

ACREAGE BY VEGETATIVE TYPES	
Range Types	**Acreage**
Grass	20,430
Meadow	20,748
Perennial Forbs	42,871
Sagebrush	2,040,640
Mountain Shrub	34,320
Barren	6,291
Pinyon-Juniper	32,748
Broadleaf Trees	7,687
Saltbush	70,600
Greasewood	72,715
Winterfat	42,449
Desert Shrub	21,562
Croplands	134,124
Unclassified	420,016
Subtotal	2,967,201
Forest Types	65,783
TOTAL	3,032,984

Related Major Issues and Problems

Composition and density of understory species have been reduced by livestock grazing. Continuous grazing has been the major factor in deterioration of the native range. Heavy use is occurring around water sources and in meadows. Minimal allocations of forage have been made for wildlife and none for wild horses. Fences for livestock management restrict wild horse and wildlife movement. The checkerboard land pattern contributes to management problems. Reduction of forage by mining, oil and gas production and related land uses such as pipelines, railroads, tramroads, haulroads and increased vehicular traffic is becoming significant in the planning unit.

Foraging sheep use the sagebrush-grassland which covers more than two-million acres in the planning unit.

Range conditions may be maintained or improved by grazing systems which at a minimum provide rest for forage used by livestock. Fencing and water developments may be required to facilitate the rotation of domestic livestock. Livestock operators desire the flexibility to change class of livestock in response to fluctuations in market price and production costs.

Improved range conditions will normally benefit livestock, wild horses, wildlife, watershed and visual resources.

Facilities such as fences may conflict with migration of wildlife and wild horses, restrict the recreationist and reduce open space values.

Multiple Use Objective

Manage livestock to increase forage for livestock and provide improvement in wildlife habitat, watershed conditions and other related resources.

Multiple Use Decisions

1. **Implement grazing systems in area 1 to meet the physiological requirements of the forage resource, provide forage for livestock and wildlife and protect aquatic habitat and visual resources. This will require numerous fences and water developments and the combining of allotments in some cases.**

   Rationale: Grazing systems are needed to improve plant vigor, density and composition and to maximize livestock forage to meet projected demand. Public comments generally favored intensive grazing management to meet multiple resource needs, rather than significant reductions in livestock use. The public also requested that fencing be held to the absolute minimum.

TABLE 8

1975 RANGE STATISTICS			
Category	Section 3 In Grazing District	Section 15 Outside Grazing District	Total
Number of Operators	171	33	204
Number of Cattle & Horses (public lands)	24,598	3,627	28,225
Number of Sheep (public lands)	120,220	11,150	131,370
Total Authorized AUMs of Forage (public lands)	166,820	8,334	175,154
Number of Crossing Permits	37	0	37
Miles of Fence			440
Number of Cattleguards/Passes			26
Number of Water Developments			323
Acres of Seeding			1,240
Acres of Brush Control			45,100
Total AUM Production	170,955	8,334	179,289
Percent Feed Public Lands Contribute to Total Livestock Feed Produced in Planning Area			13.6

2. **Implement grazing systems in area 2 to maintain the present range condition, provide forage for wildlife and meet projected livestock forage demands. These areas will require minimal fence and water development and will require that allotments be combined in some cases.**

   Rationale: Less intensive management systems are required than in area 1. Otherwise, the rationale is the same as area 1.

3. **Provide custodial management in area 3 by authorizing use on an annual basis and carrying out supervision as needed to maintain or improve range condition and to assure continued watershed protection. Exchange public lands for private lands intermingled with solidly blocked public lands in other allotments. Encourage the Soil Conservation Service to develop ranch plans on these areas in conjunction with private lands.**

   Rationale: It is proper and desirable to maintain range condition, watershed values and wildlife habitat on these areas; however, public lands are a minor part of the total. Since extensive private land is involved, a grazing system with SCS involvement is appropriate.

Fences keep livestock off of the road. However, they can be fatal to antelope, particularly in the winter.

4. **Decisions on sagebrush spraying for increased livestock forage will be made on a case-by-case basis after grazing system implementation. Normally no spraying will be allowed along streams, near aspen and willow groves and in sage grouse breeding and nesting areas, antelope and deer winter ranges and high-quality visual areas.**

   Rationale: Sagebrush spraying may not be required after implementation of a grazing system. A case-by-case approach would minimize other resource conflicts.

5. **Allow changes in class of livestock and season of use where a grazing system to protect multiple use values can be implemented. Authorize conversions in accordance with a detailed plan and consistent with range suitability only after an environmental assessment has been prepared and impacts minimized.**

   Rationale: No detailed plans or assessments have yet been made. Too many unknowns exist to allow conversions without a detailed assessment.

WILD, FREE-ROAMING HORSES

MANAGEMENT DECISIONS

A scene of the past: wild horses at a water hole. All will be removed from the Pioneer Trails Planning Area.

(See Wild, Free-Roaming Horses map, page 31.)

Program Description

Wild, free-roaming horses and burros are under the jurisdiction of the Secretaries of the Interior and Agriculture for the purposes of management and protection. Public Law 92-195 of December 15, 1971, provides for managing wild horses within ranges which may include private lands, providing that a cooperative agreement for management can be reached with the private landowner. The act also provides that horses must be removed from private land if requested by the landowner.

A number of conditions have contributed to changing the horse populations. For instance, the growth of the livestock industry in the west, the reduced use of horses by the military following World War I, the abandonment of farm horses due to mechanization, the extensive gathering of horses for commercial meat purposes, periods of extreme weather and forage conditions and the recent passage of legislation to protect and manage wild, free-roaming horses.

An Adopt-a-Horse program has been initiated to assist in the management of wild horses. The Bureau conducts roundups on over-populated ranges. The animals are then made available to qualified individuals for their personal use. Removing excess horses for adoption protects the environment and ensures that the remainder of the herd will have a more adequate food supply.

Resource Description

Approximately 350 wild horses were recently counted in the planning unit. Of these, approximately 300 are in the checkerboard area. The balance are found in small isolated bands north of the checkerboard.

Related Major Issues and Problems

Most of the horses on public lands are located in the checkerboard area. Some have been claimed by private individuals. The law provides for wild horses to be removed from private lands upon request. Some requests have been received and a plan for removal has been approved.

Multiple Use Objective

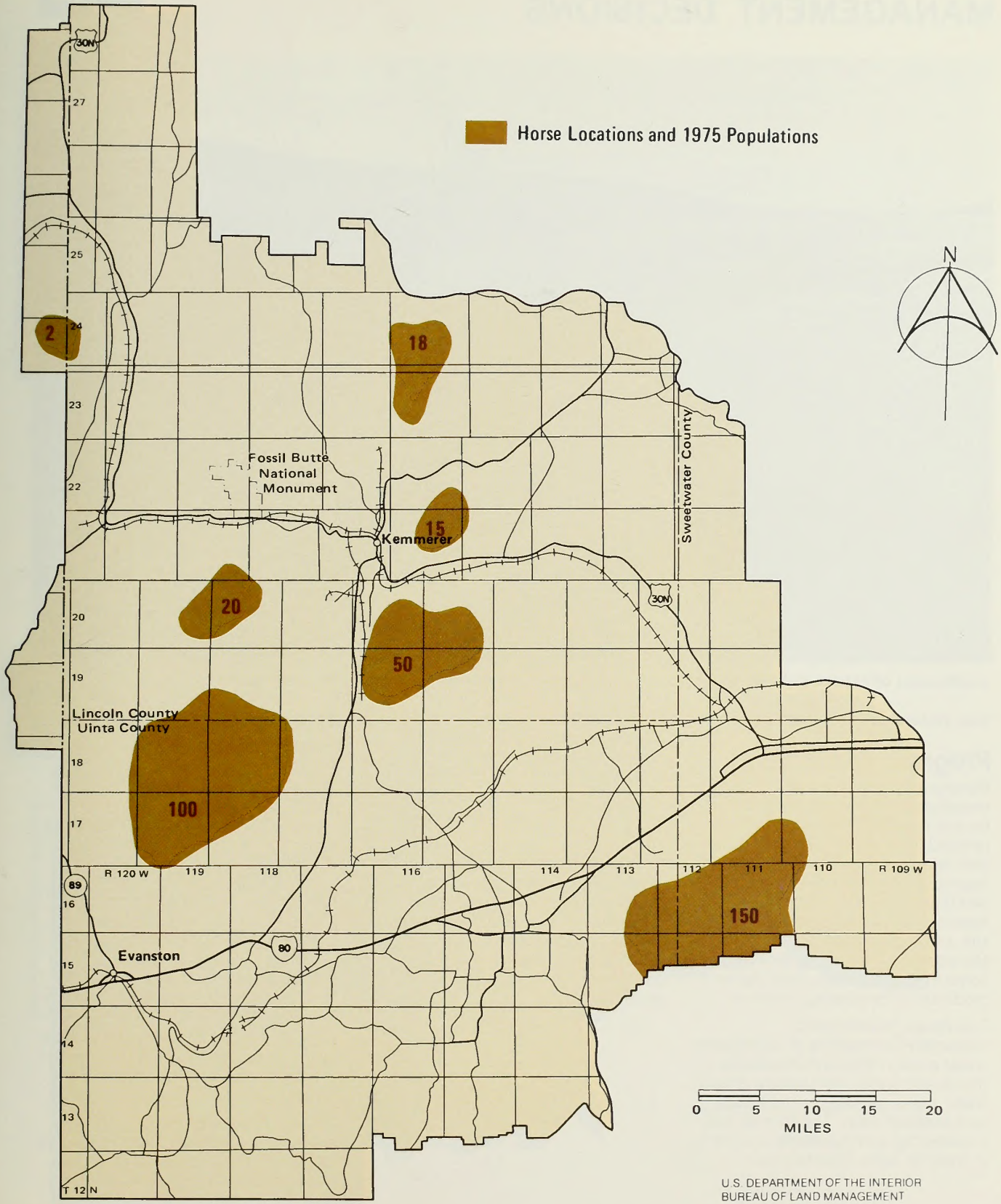
Comply with the requirements of PL 92-195 in relation to claiming of private horses and removal of wild horses from private lands. Manage wild horses as a component of multiple use management when possible.

Multiple Use Decisions

Remove all free-roaming horses on the public lands since they are either claimed or private landowners have requested removal.

Rationale: Removal of the animals from the checkerboard areas is deemed mandatory under the law. Total removal of the animals from those areas incapable of maintaining viable breeding herds is determined to be in the interest of the animals to prevent the complications of continuous inbreeding that would occur in small herds. Management herds are proposed to be maintained elsewhere in the Rock Springs District. Some public comment was opposed to the proposal.

WILD, FREE-ROAMING HORSES



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WATERSHED

MANAGEMENT DECISIONS

Stabilization of natural and man-caused erosion as at this cutbank near Skull Point has a high priority.

(See Watershed map, page 33.)

Program Description

Management of watershed is essentially the management of land for conservation and production of renewable resources. It is concerned with relationships between soil, vegetation and the quality, quantity and timing of water production from watersheds as they affect both on-site and downstream use. Management involves prescribing some kind of land use, non-use or modification of vegetation cover.

The Bureau's watershed management objective is to enhance water quality, improve streamflow timing and water yield, renew ground water recharge and control floods and sedimentation. The Bureau also provides for and maintains a uniform system for soils inventory and develops practical soils interpretations. The Bureau's soil scientists, hydrologists and watershed specialists provide technical support in understanding the use of soils and water resource data.

Practices intended to affect watersheds can be considered in two general categories: (1) protection and rehabilitation of soil and vegetation, and (2) modification of watershed resources to modify the quantity, quality and timing of water production.

Resource Description

Erosion condition of lands inventoried is shown in Table 9.

TABLE 9

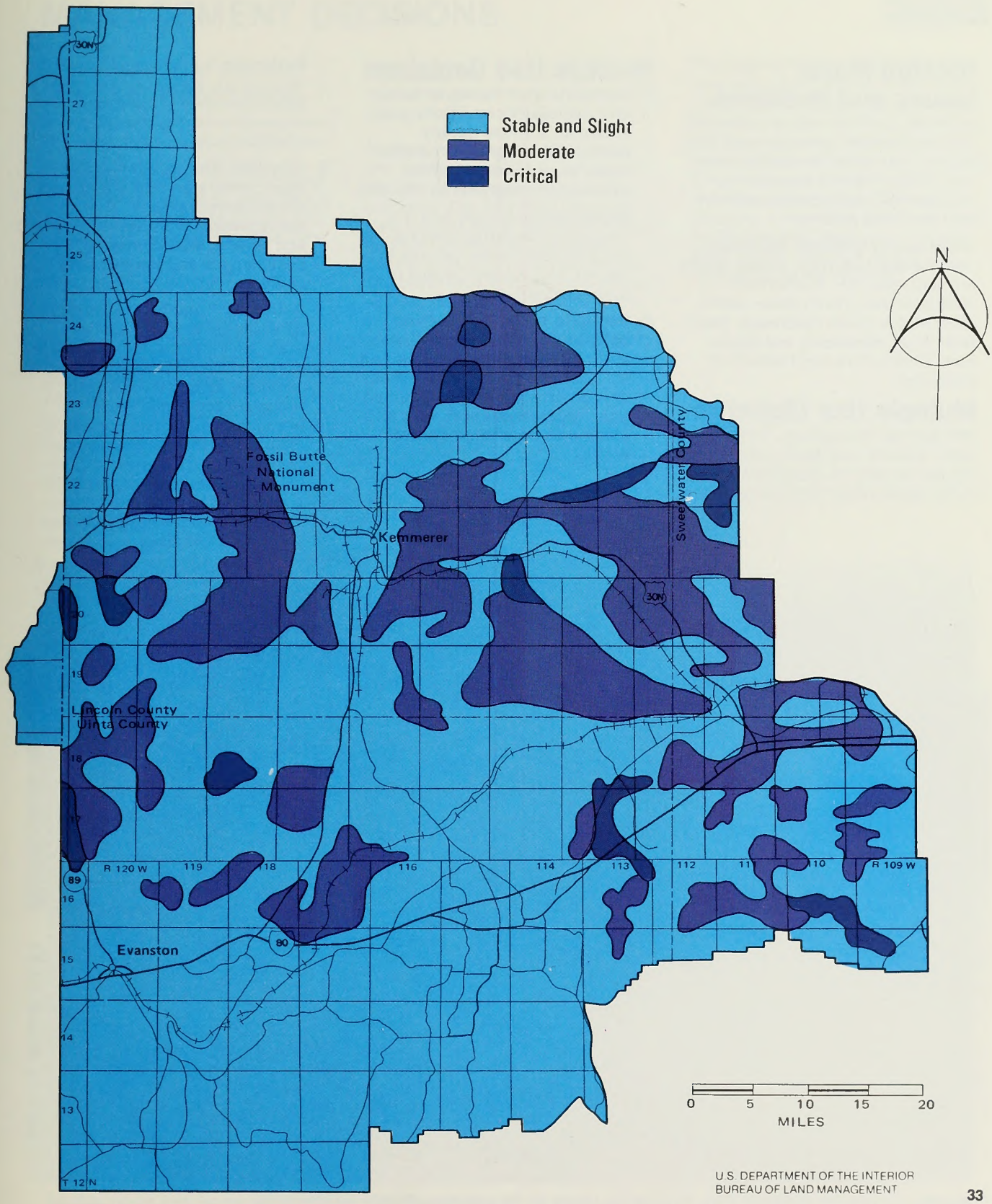
EROSION CONDITION CLASSES

Erosion Condition	Acres	Percent
Stable	58,855	6.2
Slight	494,594	51.4
Moderate	357,354	37.1
Critical	51,085	5.3
Severe	—	—
TOTAL	961,888	100.0

Most of the lands inventoried show a static trend and much of the erosion now occurring is natural geologic erosion.

On the whole, water quality in the planning unit is good and is expected to remain so. However, some problems exist or are likely to result from future developments.

WATERSHED



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Related Major Issues and Problems

Activities such as mineral exploration and development; grazing; road, trail, pipeline and utility line construction, and off-road vehicle use can contribute to watershed problems if not conducted properly.

Water quality problems are mainly from nonpoint sources. Known quality problem areas are Blacks Fork (salinity in the Church Butte reach), Little Muddy Creek (sediment), lower Bear River (sediment), and Blacks Fork, Smiths Fork and Hams Fork (nutrients).

Multiple Use Objective

Maintain soil productivity, enhance water quantity and quality and mitigate impact on watershed values in managing other resource activities.

Multiple Use Decisions

1. **Complete inventories of soils and hydrology conditions and establish a water quality monitoring program on public lands to supplement other monitoring programs in the unit.**

   Rationale: Additional data are needed to adequately manage the soil and water resources and to identify sources and causes of water pollution.

2. **Regulate surface disturbing activities such as mineral, gas and oil exploration, grazing and off-road vehicle travel in areas of high erosion, fragile soil and poor vegetation cover with site studies to determine control areas.**

   Rationale: Surface disturbance in these areas adds to erosion and sedimentation. Further study is required to delineate problem areas and control measures.

3. **Consider land treatment and type conversions for watershed enhancement after management plan development and review, environmental assessment and benefit cost analysis.**

   Rationale: Treatment areas must be analyzed on a case-by-case basis. Only treatments which have passed environmental, economic and other resource value tests should be approved.

Salinity is a problem in Blacks Fork. Finding the source of the pollution will take further study.

RECREATION

MANAGEMENT DECISIONS

(See Recreation map, page 38.)

Program Description

The recreation program covers many activities and values. In addition to visitor and cultural resource management, other major activities include management of recreational vehicle use, river management and protection of natural and wilderness values.

Public lands in Wyoming have the potential for a wide range of recreational uses. These include hunting, fishing, camping, picnicking, rock-hounding, sightseeing, river floating and many other outdoor activities.

BLM's recreation program provides facilities and information. It also seeks to assure the continued availability of resources for recreational use and increased visitor safety through eliminating or neutralizing hazards.

Resource Description

Recreational activities in the planning unit are outlined in Table 10.

Recreation values of the planning unit are closely tied to open space values and the relatively natural condition. The Raymond Mountain area located along the Idaho border north of Cokeville is a potential natural area. It is extremely remote and essentially void of intrusions and access. Geologic formations and a varied vegetative cover give it outstanding scenic qualities. Wildlife values are high including the presence of native Bear River cutthroat trout.

The planning unit is crossed by the Overland, California, Mormon, Pony Express and Oregon Trails, including several "cutoffs" to the latter. Many historic and archeological sites are located in the planning unit, including Emigrant Springs, the Bridger Antelope Trap and the Piedmont Charcoal Kilns, all of which are listed on the National Register of Historic Sites. Other sites may qualify for nomination to the Register.

Wildlife values and recreation combine on a fishing stream.

TABLE 10

RECREATIONAL ACTIVITIES — 1975*		
Activity	Unit	Units (Approx.)
Hunting—Big Game	Hunter Days	17,500
Hunting—Upland Game	Hunter Days	4,500
Hunting—Water Fowl	Hunter Days	1,000
Fishing	Fishermen Days	81,900
Winter Sports	Visitor Days	4,000
Water Sports	Visitor Days	6,700
Collecting	Visitor Days	5,000
Sightseeing (Specific)	Visitor Days	1,250
Off-Road Vehicles	Visitor Days	11,100
Camping	Visitor Days	3,000
Picnicking	Visitor Days	2,000

*Includes Private and State Lands.

A crack of the throttle and a cloud of . . . topsoil. Limitations on ORV use may be necessary.

Related Major Issues and Problems

Natural Area
A "natural" or "special management" area designation in the Raymond Mountain area could mean restriction of uses such as surface mining, oil and gas activities, road construction, timber cutting, off-road vehicle use and other human activity.

Historic, Archeological and Paleontological Values
Protection of historic sites and trails, archeological and paleontological sites will restrict other resource activities.

Off-Road Vehicles (ORV)
ORV use on the public lands is widespread and unrestricted. Certain limitations of ORV use are being considered to minimize disturbance to critical wildlife habitat, to prevent watershed damage and to protect the cultural, natural and open space values.

The regulation of off-road travel to protect wintering wildlife could take the form of total closure during that period or the limiting of travel to designated routes.

Watershed protection measures would eliminate existing routes or segments that are eroding, eliminate vehicular travel off designated routes and close trail areas to travel during wet seasons.

The protection of other values could include total closure to protect natural, historic or archeological sites, partial closure to eliminate unsightly scars or limited travel to designated routes to preserve open space.

Multiple Use Objectives

Natural Areas
Manage areas with unique natural features to minimize surface disturbance and preserve the values present until final management decisions can be made.

Hunting is a major use of the public lands, and must be considered in any closure proposals.

Historic, Archeological and Paleontological Value
Provide protection and interpretation for historic, archeological and paleontological resources, while permitting other resource use and development.

ORV
Keep public lands open for ORV use to the maximum extent possible while minimizing disturbance to critical wildlife habitat, watershed values, historic, archeological and paleontological resources and natural and open space values.

Multiple Use Decisions

1. **Natural Area**
   Study the Raymond Mountain area for possible withdrawal as a natural special management, primitive or wilderness area.

   Rationale: The Raymond Mountain area has outstanding scenic and geologic features. The area is essentially roadless with good game populations. Public comment supported the "natural area" designation while significant interest surfaced for a study of its potential under the wilderness system.

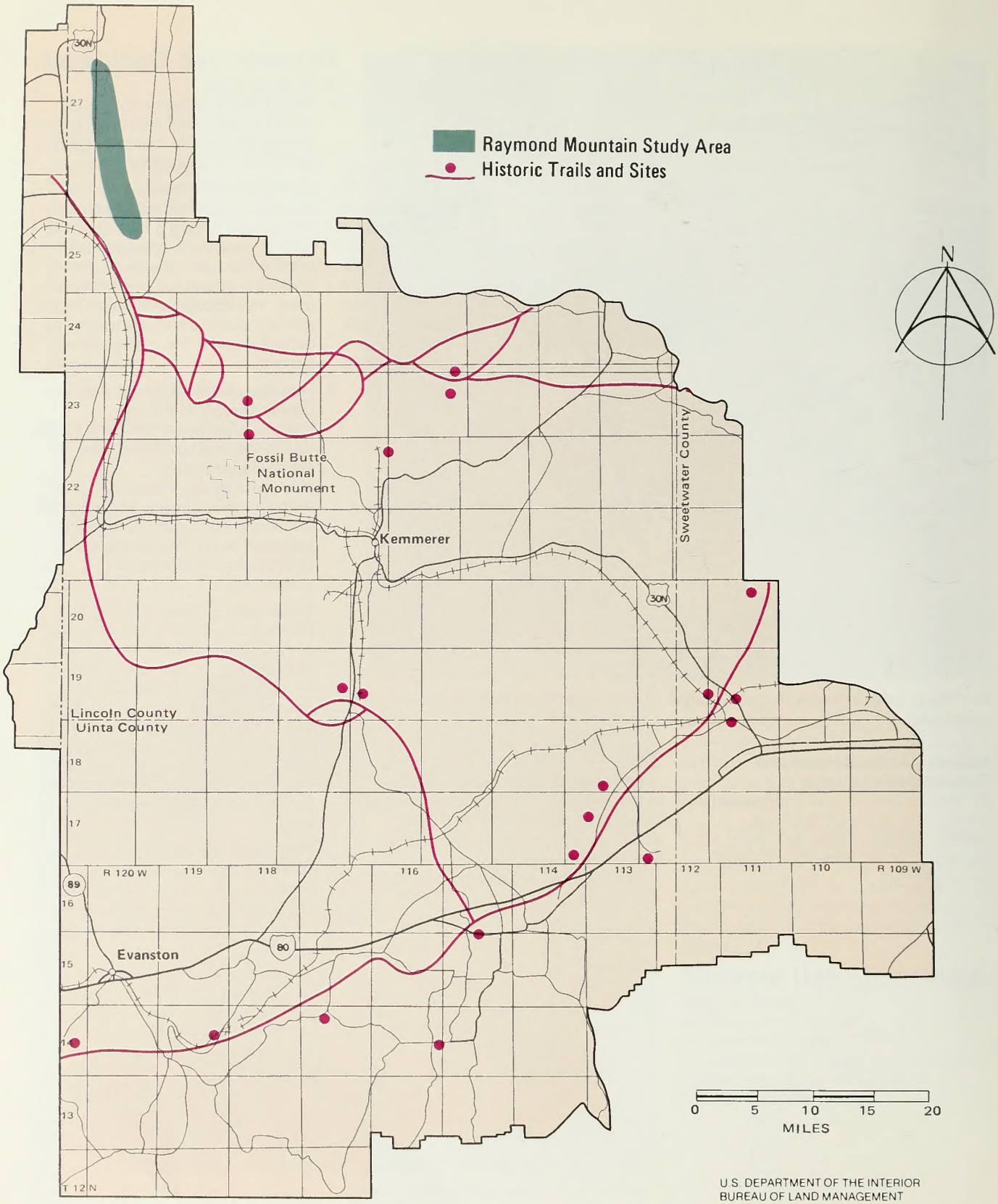
2. **Historic, Archeological and Paleontological Values**
   Protect significant historic trails and sites and undiscovered archeological and paleontological resources from disturbing activities. Develop an informational and interpretive program to maximize public enjoyment of significant resources.

   Rationale: Section 106 of the National Historic Preservation Act of 1966 (P.L. 89-665), section 2(b) of Executive Order 11593, and section 101(b)(4) of the National Environmental Policy Act of 1969 (P.L. 91-190) require protection of significant historic, cultural and paleontological resource values. Proper protection will ensure that scientific values are not lost.

3. **ORV**
   Designate the planning unit open to ORV use subject to further study to determine the need for regulation or closures based on resource values and uses.

   Rationale: Adequate data and justification are not available to regulate or close areas to ORV use. The Raymond Mountain area is to be studied for possible future designation and closure to ORV,as are many game ranges and unstable watershed areas.

RECREATION



U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

WILDLIFE

MANAGEMENT DECISIONS

(See Wildlife map, page 42.)

Program Description

The wildlife program is primarily concerned with the protection and improvement of habitat for all forms of game and non-game wildlife species. Wildlife is a major program in this planning unit because of the quality, variety and abundance of game and aquatic habitat. Wildlife values are an important consideration in developing other program decisions.

In order to protect and enhance these values, habitat management planning has become a major component of the wildlife program. The program activity is closely coordinated with the Wyoming State Game and Fish Department in conformance with their responsibilities for game populations.

Resource Description

BLM administered lands provide important habitat to a wide variety of terrestrial and aquatic wildlife. Wyoming ranks first in antelope and sage grouse. Game include mule deer, elk and moose.

Threatened and endangered wildlife species that are probable inhabitants of public lands are the peregrine falcon and black-footed ferret. Colorado River and Bear River cutthroat trout habitat are two of our most significant fisheries habitats. This significance is based on the rarity and the natural interest in maintaining habitat for native species.

Upland game birds and waterfowl are also significant users of public lands. Habitat improvements are attainable through reservoir construction, reservoir fencing, nest construction and grazing management systems.

Table 11 provides a summary of wildlife species, population trends, acres of habitat and habitat status.

TABLE 11

TERRESTRIAL HABITAT DATA

Species	Habitat Acres (approx.)	Habitat Status Quality	Habitat Status Quantity	Population Status
Elk				
Summer	184,320	Good	Stable	Increasing
Winter	374,400	Good	Stable	
Mule Deer				
Summer	1,382,400	Good	Decreasing	Stable
Winter	765,440	Fair	Decreasing	
Pronghorn				
Summer	2,180,400	Good	Stable	Increasing
Winter	551,680	Good	Stable	
Moose				
Summer	645,120	Good	Stable	Slightly
Winter	666,240	Good	Decreasing	Increasing
Black Bear	405,760	Fair	Stable	Increasing
Sage Grouse	2,920,344	Good	Decreasing	Unknown
Breeding & Known Strutting	280,482			
Known Winter	109,440			
Ruffed Grouse	216,320	Good	Stable	Stable
Blue Grouse	143,360	Good	Stable	Stable
Chuckar	72,960	Poor	Stable	Unknown
Hungarian	76,960	Good	Stable	Unknown
Ducks	428,800	Unknown	Stable	Unknown
Geese	106,880	Unknown	Stable	Unknown

No information has been documented in the planning unit regarding endangered or threatened species and their habitats. To maintain or protect habitat for threatened or endangered species, the locations, season of use and forage or prey species which influence the animals must be known.

Data on habitat for non-game species and raptors are lacking. However, inventory work is now increasing in these areas.

A recent stream inventory resulted in the aquatic habitat data shown in Table 12.

The Thomas Fork drainage contains genetically pure descendants of the original Bear River cutthroat variety.

Related Major Issues and Problems

Management of wildlife habitat is of prime importance to the wildlife and to a balanced environment. Management of crucial habitat is a major issue.

BLM provides food and cover on important areas, such as winter and early spring ranges, for big game and for the reproductive period for sage grouse. Other related problems are inadequate forage allocations and water development, restriction of movement due to fences, competition for forage with livestock and wild horses and disturbance caused by human activity (mining, recreation, ORV's).

Vegetative and soil disturbing activities have an effect on food, cover and water quality. These activities are increasing and result in decreasing wildlife habitat. Some uses may have to be restricted or excluded within crucial habitat areas. Impacts could occur to recreation, livestock grazing and mineral exploration.

Multiple Use Objective

Maintain or improve terrestrial and aquatic wildlife habitat with special emphasis on crucial habitats (i.e., winter ranges, nesting and strutting areas, calving grounds, spawning areas, etc.) to support present populations.

Multiple Use Decisions

1. **Habitat Protection**
   Provide stipulations on land use authorizations to protect crucial wildlife habitat where feasible and to rehabilitate surface disturbances with adapted vegetation. Implement ORV closures as the need arises in conjunction with Wyoming Game and Fish Department recommendations. Limit fencing which restricts normal wildlife movement during any season of the year.

   Rationale: Conflicts with crucial wildlife habitats cannot be eliminated although they can be largely reduced. Most of the unit is leased for oil and gas development and exploration is increasing in the overthrust belt. Additionally, coal, phosphate and sodium leases cover many areas.

   Indiscriminate human activity, particularly snowmobiling can have an extremely damaging effect on wildlife. This action can cause stress on the animals during periods when they are least able to withstand the effects.

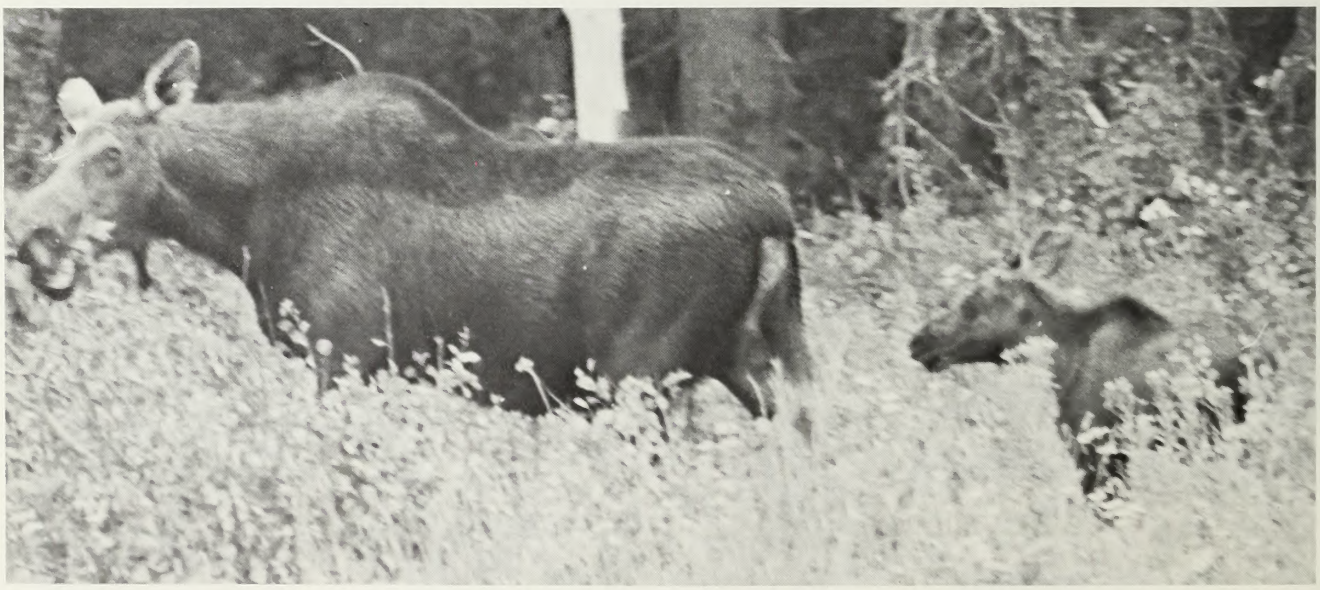
   Closures will be made when the Wyoming Game and Fish Department has documented a problem and has made a specific request for closure. These will be limited to the minimum area and time period required and subjected to public review.

   Improperly located and poorly designed livestock control fences can greatly affect wildlife movements. Proper fence design can largely mitigate this interference. Careful on-the-ground study can help to avoid the problems associated with poor fence location.

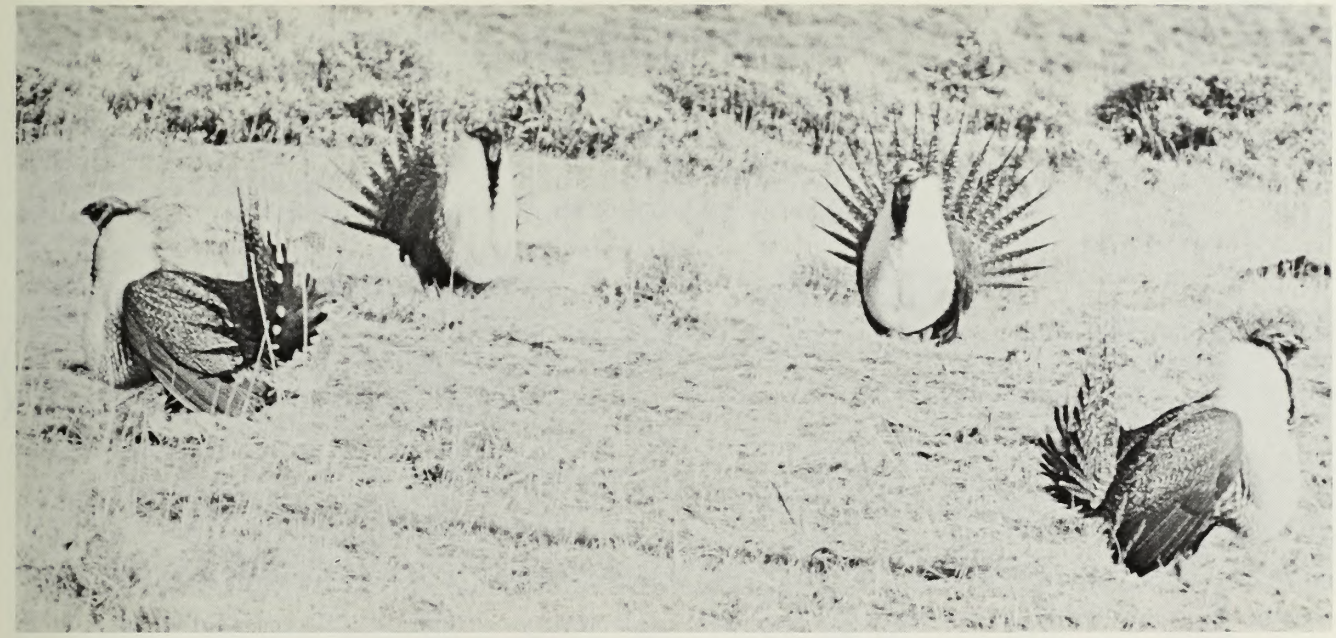
2. **Habitat Expansion and Improvement**
   Install water developments for antelope and sage grouse in the Carter and Granger lease areas subject to habitat management plan and environmental assessment.

   Rationale: Water development could expand the habitat area for antelope and sage grouse. Early implementation is required to offset eventual habitat losses in the projected coal mining area. Public comment strongly supports this effort.

3. **Habitat Improvement**
   Implement habitat improvement projects for elk, mule deer, moose, forest grouse, fish and beaver. Improvements may include: mountain mahogany pruning or chaining; juniper chaining; aspen regeneration; sagebrush to grass conversion; and willow planting. All improvements will be consistent with habitat management plans, implementation of a grazing system, environmental assessment, cost/benefit analysis and Wyoming Game and Fish Department review.



A cow moose and her calf use some of the more than 600,000 acres of summer habitat on public land.



Habitat for the sage grouse is decreasing. Habitat improvement is planned in the Granger and Carter areas.

Rationale: Vegetation conversions and reseeding may be needed if deteriorated habitat does not respond to changes in management. Improved habitats could offset losses expected to occur because of coal mining activity.

4. **Inventories, Studies and Plans Complete necessary inventories, studies and plans for wildlife habitat management.**

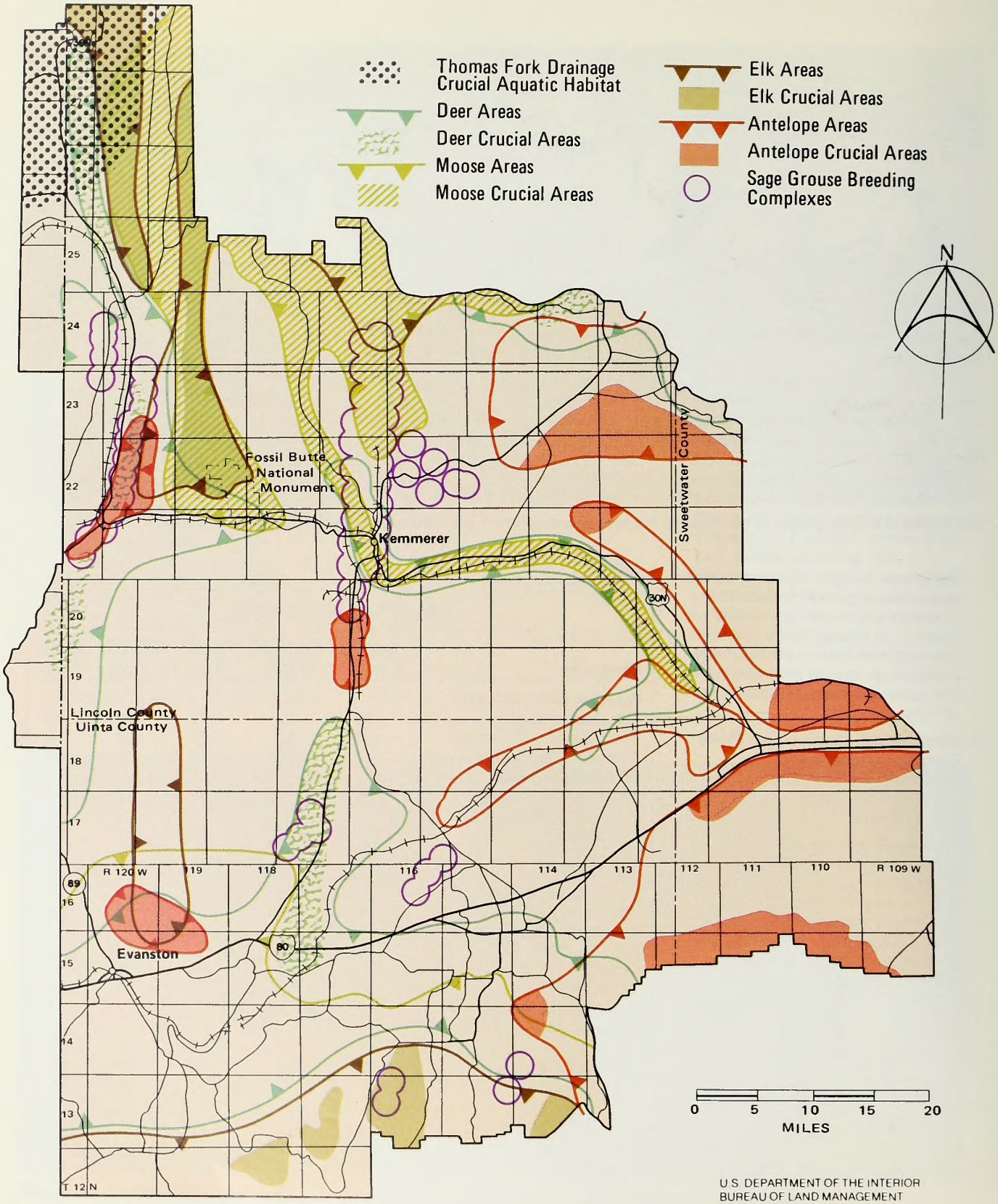
Rationale: Information on threatened and endangered wildlife, non-game species, raptors and critical wildlife habitat is essentially lacking. The unit is an important wildlife area and is abundant in needed energy and mineral resources.

TABLE 12

AQUATIC HABITAT DATA

Drainage	Smiths Fork	Thomas Fork	Bear River	Blacks Fork	Hams Fork
Number of Streams in Drainage on public lands	28	12	43	24	33
Total Miles of Streams	109	60	467	317	114
Stream Miles (public lands)	46	38	188	97	56
Stream Miles (public lands) Inventoried	27	33	33	12	40
Spawning Habitat					
% Good	5	12	12		20
% Fair	28	22	60	1	21
% Poor	25	47	19	9	22
% Virtually None	17	19	9	63	18
% None	25			27	19
Resident Habitat					
% Good	24	7		16	1
% Fair	31	87	88	70	81
% Poor	39	3	12	13	13
% Virtually None	6	3		1	5
Channel Stability					
% Stable	29	14	60	33	36
% Declining	71	86	40	77	64

WILDLIFE



U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

CUMULATIVE ENVIRONMENTAL OVERVIEW

Plants such as this of the FMC Corporation, southwest of Kemmerer, pose a problem: economy versus wildlife and recreation values.

Lands

Major land use decisions will provide public land for controlled development and growth, while allowing for the consolidation of utility routes in designated corridors.

Social well-being, income, employment, tax base and the general economy of the area would benefit from controlled land disposal and development. The overall environment, including the visual resource, would also benefit from this controlled development, which would confine facilities to zoned areas and corridors, thus protecting open space values.

As a result of these actions, negative short and long term impacts could occur which could affect water quality, visual resources, community services (health, education, police, roads, etc.), historic sites and trails, wildlife habitat and undiscovered cultural resources.

Minerals

Impacts resulting from mineral resource decisions have beneficial and adverse effects on social values and the environment. Those minerals having the greatest development potential are coal and petroleum products. Development of the coal will provide needed power, primarily for electrical power generation.

The area designated for coal development is already impacted by existing mines, power plants and roads; therefore, increased production would magnify the existing situation. This would result in impacts to wildlife, visual resources, livestock forage, water and air quality, during development, production and rehabilitation. Social values will be adversely affected. Development of the resource would cause increased population, thereby increasing demands on already limited facilities and public services (schools, law enforcement, medical care, etc.). Benefits will occur through increased income, employment, tax base and improvement in the general economy.

The decision to allow continued oil and gas development could have a cumulative and wide ranging adverse effect on other non-renewable resources throughout most of the unit. Impacts would be scattered, additional protective measures would apply to each site, thereby mitigating the overall effect.

Social values would be affected, as described for coal development. Oil and gas development will be more widely spread and affect most communities to some extent.

Forest Products

Forestry decisions, related to stand improvement and development, would have minor impact from surface disturbance on visual resources, wildlife and watershed. Benefits would include employment opportunity through timber sales. Environmental benefits from well managed forest lands would include a more healthy resource capable of providing for other uses.

Range Management

Livestock forage decisions are directed at maintaining or improving the vegetation. Improved range condition and forage production will benefit all activities dependent on a sustained yield of quality rangeland vegetation.

Management practices such as fences, water development and vegetation treatment will be so designed as to minimize the effect on wildlife, recreation and open space values, increasing vigor and establishing new plant growth. Allowance for change in class of livestock will be dependent on benefit to the vegetative resource and other competing uses, whichever combination will result in ecological balance.

Maintaining a vigorous and healthy vegetative cover is a sound base for multiple use management of this resource.

Wild Horses

The decision provides for removal of horses from the checkerboard area, which contains more than 50% private land. This will result in the reduction of overuse on the vegetation, thereby benefiting livestock, wildlife, watershed and overall environmental quality.

Watershed

Enhancement and protection of water quality, soils and vegetation is stressed as a means of improving the watershed. Environmentally acceptable management practices and land treatments are proposed to improve watershed condition, by correcting imbalances resulting from past uses. Benefits expected are decreased soil erosion, improved vegetative cover and a better water quality.

Adverse impacts are slight to non-existent as far as the environment is concerned, although some social impact could result from special stipulations on surface disturbing activities.

Values such as the Ft. Bridger historic site, above, will be protected through control of surface disturbing activities.

Recreation

Minimal impacts are expected from recreation management decisions. In general they favor environmental protection and continuance of present life styles. Control of surface disturbing activities and location of intrusions will preserve historic values and maintain a quality visual resource.

Natural areas will be preserved. Recreation activities will not be allowed to significantly degrade ecological interrelationships. Historic sites and trails are to be managed and preserved for their social values. Some controls for protection of geologic values, scenic qualities and endangered fauna and flora will no doubt conflict with other uses, even within the recreation program. An example of this would be restrictions on off-road vehicle use.

Wildlife

Management actions are aimed at benefiting wildlife habitat and associated species, by maintaining a balanced environment. Decisions are directed at areas such as winter and early spring big game ranges, sage grouse strutting grounds and reproductive areas, and kidding, fawning and calving grounds.

Other management goals include a balanced allocation of the vegetation and water, minimum disturbance of habitat and movement and proper control of all competing uses. Restrictions on other activities will change the existing way of life, but will provide more social and environmental benefits than adverse impacts.

INTERRELATIONSHIPS WITH OTHER PLANS

During development of the Pioneer Trails MFP, an effort was made to coordinate this plan with other federal, state and local government officials. This was to ensure that BLM planning efforts and management decisions do not conflict with land use plans of other agencies. Agencies or government officials contacted during the planning process, in addition to the public meeting, include: U.S. Forest Servie, Soil Conservation Service, Bureau of Reclamation, U.S. Geological Survey, U.S. Fish and Wildlife Service, Wyoming Game and Fish Department, Sweetwater County Commissioners, Sweetwater County Planning Commission, Lincoln and Uinta County Planning Office and Southwestern Wyoming Water Quality Planning Agency. BLM districts were contacted to ensure interdistrict coordination.

Many of the decisions in the Pioneer Trails MFP will have significant implications affecting other agencies. Major decisions relative to coal development could affect every agency mentioned above. For some government organizations, coal development on a large scale will create significant workloads, especially for the Wyoming State Department of Environmental Quality and U.S. Geological Survey. Decisions relative to reserving public lands for community expansion and public purposes should benefit local governments concerned with growth in several of the communities in the Pioneer Trails Unit.

Intensifying livestock grazing will affect agencies such as the Soil Conservation Service, Wyoming State Land Board and U.S. Forest Service who work with the same range users. Range management practices affect wildlife populations either beneficially or adversely. This will have a direct impact on the Wyoming Game and Fish Department. Existing procedures call for cooperative planning on range management by all agencies involved.

Wildlife management decisions have been coordinated with the Wyoming Game and Fish Department to ensure that BLM management of the habitat is coordinated with the department's objectives for each wildlife species.

Meetings in December 1976 assured that all persons and agencies had a chance to review and comment.

MFP decision areas adjoining the national forests are of interest to the U.S. Forest Service. Of particular note is the decision to return public lands adjoining the Wasatch National Forest to oil and gas leasing activity and further to actively manage forest resources on those lands.

The decision to develop snowmobile trails requires a joint effort with the Bridger-Teton National Forest. Acquisition of permanent access could affect the U.S. Forest Service study of roadless areas.

The call for revocation of all Bureau of Reclamation withdrawals that are not serving the purposes of the original withdrawal could have considerable effect on Reclamation plans since some of the lands are proposed for recreation management by that agency.

Much of the public lands surrounding Fossil Butte National Monument are visible from that reserve. Actions on the public lands which could impact visual quality would be of major concern to the National Park Service. BLM campgrounds which could serve National Monument visitors would be desirable from a National Park Service viewpoint.

Decisions that could result in the establishment of roadless areas would be of major importance to the Wyoming State Land Board. Conversely, the development of legal access and intensive forest management on public lands would often be of major importance to the management of state forest resources.

A major relationship exists with land use planning efforts by Lincoln, Uinta, Sweetwater, Rich (Utah) and Bear Lake (Idaho) counties. The three Wyoming counties are most affected by a variety of decisions which tend to forecast specific land uses. The greatest interest has been expressed in those decisions dealing with mining, road networks, utility corridors and industrial zones. To the extent local planning has been completed, the MFP decisions generally complement it.

These are some examples of the coordination which has taken place to date on some of the issues.

Almost any decision in this MFP affects other government organizations and their land use plans.

ACTIONS AFTER THE MFP

Planning ahead is not the same as knowing ahead of time. Changes in this plan will be made in the future with public review.

This plan will be followed by on-the-ground actions. Some decisions in the plan may require more detailed planning prior to action.

These actions are subject to the requirements of the National Environmental Policy Act. An environmental assessment is prepared for each action whether it is initiated by industry or BLM. If the impacts are unacceptable, the proposed action may be modified or rejected.

On-the-ground actions initiated by BLM are contingent upon funding by Congress. It may be some time before some of these decisions are implemented.

This plan will be continually updated. As new resource information becomes available, as technology improves, as public needs and demands change, and as laws, regulations and policies change, this plan will be revised.

Any major changes will be subject to public review and comment.

GLOSSARY

As in most systems, BLM's Planning System has its own "language." To help you understand some of the terms used in this brochure, a glossary is included for reference:

Checkerboard Land Pattern: A land ownership pattern resulting from early railroad grants made by the federal government to the Union Pacific Railroad Company to encourage construction of a transcontinental railroad system and settlement of the west. Generally, even numbers sections are public lands and odd numbered sections privately owned.

Closed Areas and Trails: Areas and trails where the use of off-road vehicles is permanently or temporarily prohibited.

Exploration Plan: A description of the area to be explored, the method and equipment to be used, access, and the measures to be taken to prevent or control fire, soil erosion, pollution of surface and ground water, damage to fish and wildlife or other natural resources, and hazards to public health and safety during and after exploration.

Management Framework Plan (MFP): A planning decision document which establishes, for a given planning area, land use allocations, coordination guidelines for multiple use and management objectives to be achieved for each class of land use or protection. It is the Bureau's Land Use Plan. It is prepared in three steps: Step One — Resource Recommendations; Step Two — Impact Analysis and Alternative Development; and Step Three — Decision-making.

Mining Plan: A description of the area to be mined, the method and equipment to be used and the reclamation proposed.

Natural Area: Areas established to preserve scenic values and areas of natural wonder. The preservation of these resources in their natural condition is the primary management objective. Access roads, parking areas and public use facilities are normally located on the periphery of the area. The public is encouraged to walk into the area for recreation purposes.

Off-Road Vehicle: Any vehicle capable of, or designed for travel on or immediately over land, water, or other natural terrain, deriving motive power from any sources other than muscle, excluding: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, law enforcement or other government vehicle while being used for official or emergency purposes; (3) any vehicle whose use is expressly authorized on public land.

Open Areas and Trails: Areas and trails where off-road vehicles may be operated subject to the operating regulations and vehicle standards.

Planning Area: One or more complete planning units for which a land use plan is to be prepared.

Planning Area Analysis: This document analyzes requirements of the public now and in the future for lands, and renewable and non-renewable resource. It shows the significance of the lands within a planning area to users, operators, the community, and region. It is based on data in the URA, Socio-Economic Profile and other regional information.

Planning Unit: A portion of a Bureau of Land Management district used for assembling resource inventory data. For each planning unit the district manager prepares a Unit Resource Analysis.

Primitive Area: Natural, wild, and undeveloped lands in settings essentially removed from the effects of civilization. Essential characteristics are a natural environment that can be conserved and on which there is no undue disturbance by roads and commercial uses.

Regulated Areas and Trails: Areas and trails where the use of off-road vehicles is subject to restrictions deemed appropriate by the authorized officer. Restrictions may limit the number of types of vehicles allowed, times of use, areas or trails used and similar matters.

Riparian Vegetation: Vegetation associated with the area or zone along the bank of a river or other body of water.

Socio-Economic Profile: An information document for use in plan preparation. It describes the human populations in terms of social and economic factors. It also provides a checklist of other state and federal agencies to be consulted. It analyzes and records data relating to a relatively large region or area sharing similar socio-economic characteristics. A region may be a group of entire, adjoining counties, or it may approximate a district. It includes several planning areas.

Unit Resource Analysis (URA): A basic source of information on the land and its resources, consisting of:

- Base Map
- Physical Profile
- Resource Inventory Summaries
- Resource potential and capability of the land to fill the public's needs for these activities: lands, minerals, recreation, wildlife, watershed, forest products, and range management.
- Ecological Profile: a description and an analysis of the existing state of the ecosystems in the planning system.

☆ U. S. GOVERNMENT PRINTING OFFICE: 1977 — 780-

COMMENT SHEET

District Manager
Bureau of Land Management
Rock Springs, Wyoming 82901

Following are my comments regarding the Pioneer Trails Land Management Plan:

(tear here)

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Address _____

City _____ State _____ Zip _____

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STATE OFFICE

P.O. Box 1828
2515 Warren
Cheyenne, Wyoming 82001
Phone 778-2220-2326

DISTRICT OFFICES

Rock Springs District Office
P.O. Box 1088
Highway 187N
Rock Springs, WY 82901
307-362-6613

***Green River Resource Area**

Pinedale Resource Area
P.O. Box 768
Molyneux Bldg.
Pinedale, WY 82941
307-367-4358

Kemmerer Resource Area
P.O. Box 632
Kemmerer, WY 83101
307-877-3933

Rawlins District Office
P.O. Box 670
1300 3rd Street
Rawlins, WY 82301
307-324-6621

***Divide Resource Area**

***Medicine Bow Resource Area**

Lander Resource Area
P.O. Box 589
Lander, WY 82520
307-332-4220

Worland District Office
P.O. Box 119
1700 Robertson Ave.
Worland, WY 82401
307-347-6151

***Shoshone Resource Area**

***Washakie Resource Area**

*Located at District Office

Casper District Office
951 Union Blvd.
Casper, WY 82601
307-265-5550, ext. 5101

***Platte River Resource Area**

Buffalo Resource Area
P.O. Box 670
Buffalo, WY 82834
307-684-5586

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